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# PROPOSED FISCAL YEAR 1986 BUDGET REQUEST

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# HEARINGS

BEFORE THE

## COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

NINETY-NINTH CONGRESS

FIRST SESSION

TO REVIEW THE PRESIDENT'S PROPOSED BUDGET FOR FISCAL YEAR 1986 IN CONNECTION WITH THE PREPARATION OF THE MARCH 15 REPORT TO THE SENATE BUDGET COMMITTEE

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FEBRUARY 27, MARCH 1 AND 4, 1985

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Committee on Energy and Natural Resources

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# PROPOSED FISCAL YEAR 1986 BUDGET REQUEST

## (Department of the Interior)

### WEDNESDAY, FEBRUARY 27, 1985

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
*Washington, DC.*

The committee met, pursuant to notice, at 9:33 a.m., in room SD-366, Dirksen Office Building, Hon. James A. McClure (chairman) presiding.

Present: Senators McClure, Wallop, Warner, Hecht, Evans, Ford, and Bingaman.

Also present: Frank M. Cushing, staff director; Gary G. Ellsworth, chief counsel; Richard D. Grundy, senior professional staff member; D. Michael Harvey, chief counsel for the minority; Thomas B. Williams, professional staff member for the minority; Benjamin S. Cooper, professional staff member for the minority; James T. Bruce, counsel for the minority; and Linda Mason, professional staff member for the minority.

### OPENING STATEMENT OF HON. JAMES A. McCLURE, A U.S. SENATOR FROM THE STATE OF IDAHO

The CHAIRMAN. The committee will come to order.

Today the Committee on Energy and Natural Resources begins hearings on the President's fiscal year 1986 budget for programs of the Department of the Interior. On Friday we will continue with testimony from the Forest Service, the Federal Energy Regulatory Commission, and the Synthetic Fuels Corporation. And, on Monday, we will conclude with testimony from Secretary of Energy John Herrington.

The Department of the Interior has a special role as the steward of our Nation's natural resources. As Secretary Hodel appreciates, the last 4 years of budgetary restraint have presented a seemingly unending series of difficult choices. But, more importantly, while each decision has significant national policy implications, each decision also affects the daily lives and livelihoods of current and future Americans.

Those of us from the West have long recognized the policy implications of so-called budgetary decisions. But during the last 4 years, such budget decisions have come to equally affect all regions of our country.

I am as committed as the administration to bringing the budget under control and I sincerely hope that we will have the full support of the Department and the administration in seeing that our responsibilities to the American people are performed in a manner which will not only be cost effective but which will also contribute to the future growth and welfare of this Nation. The Department's responsibilities include both protection and development of the public lands, research and conservation, the care and management of our National Parks and historic resources, and the welfare and development of our citizens in the territories. The task is complex involving many difficult judgments and often requiring a balancing of varied conflicting interests.

That task is made all the more difficult in the face of the budget deficit, and it will require considerable skill and sensitivity to determine where budget savings can be made without jeopardizing our responsibilities of our future. Certain activities such as the Mineral Research Institutes are investments in our future, and the protection of our national parks is an obligation we have to other generations. We will need to work together if we are to resolve the tasks before us affecting the public domain, including rangeland issues and section 3 of the Federal Coal Leasing Act and section 2(c) of the Mineral Lands Leasing Act. We need to bring an order to the development of the Outer Continental Shelf and we need to exert our efforts to assist the territorial governments to become economically self sufficient. We will need to consider innovative solutions to some of our problems, such as land exchanges rather than acquisition, and we will need to be receptive to proposals which may promote more effective management of our resources. In that regard I hope that the recent proposals by the Bureau of Land Management and the Forest Service on land transfers will be carefully considered by everyone as the proposal is developed. I would expect both the Department of the Interior and the Department of Agriculture to consult closely with not only this committee and the affected States, but also with the many organizations and individuals who will be interested and affected.

I would observe that the Department of the Interior budget for the current fiscal year of 1985 is $6.7 billion; this is essentially the same as for fiscal year 1981, which was $6.6 billion. The proposal for fiscal year 1986, however, does not attempt to freeze departmental activities; it proposes a further reduction of $1.08 billion, a decrease of over 16 percent.

But that is not enough, once again we see the same old, tired, and unrealistic proposals which the administration has been making for 4 years, and which the Congress, and I believe the American people, have repeatedly rejected. For example, I would mention termination of the Historic Preservation Program, Land and Water Conservation Fund, and Mineral Institutes programs. Other proposals, such as those affecting the Power Marketing Administration cannot be legally implemented within the timeframe contemplated by the budget and the revenue estimates ignore the economic impact of implementation.

We all have different ideas on which programs of the Department should be emphasized. There are areas where some savings may be possible. For example, it may be possible to spread out the

Bureau of Reclamation construction program. But, before we can proceed, we must fully understand the implications of the administration's proposal and the out year revenue impacts of the economy of delays in the completion of the projects.

What is at stake is the shape of our Nation's energy production, food and mineral supplies, recreational opportunities, and environmental quality.

As we proceed with the current budget debate, I am sure that my concerns, as well as the priorities of the committee and the Congress, will quickly become evident. As the budget and appropriations processes move forward, I hope to work closely with you—Mr. Secretary—to see proposals that can be accommodated within a fiscally responsible budget for fiscal year 1986.

Before we begin your testimony, Mr. Secretary, I will defer to other members of the committee who may wish to make opening statements.

I know that members on this side of the aisle have a Republican conference at 10:30, and we'll try to expedite the hearing as much as we can. I also want to express a special welcome to a new member of the committee, Senator Bingaman.

Senator BINGAMAN. Thank you.

The CHAIRMAN. We noted that it's almost the first of March, and we've got the committee organized already.

Are there others who have statements they'd like to make at this time? Senator Wallop?

Senator WALLOP. No, Mr. Chairman.

The CHAIRMAN. Senator Hecht.

Senator HECHT. No, Mr. Chairman.

The CHAIRMAN. Senator Bingaman.

Senator BINGAMAN. No, I have none.

The CHAIRMAN. All right, sir.

Mr. Secretary, your entire statement will appear in the record in full. You may summarize or proceed as you would desire at this point.

## STATEMENT OF HON. DONALD PAUL HODEL, SECRETARY, DEPARTMENT OF THE INTERIOR

Secretary HODEL. Mr. Chairman, thank you. In the interest of time, rather than summarizing the opening statement, perhaps if the committee would like to go to questions, we can do that. I think the statement is quite complete.

[The prepared statement of Secretary Hodel follows:]

## Statement of Donald Paul Hodel, Secretary of the Interior
## before the
## Senate Committee on Energy and Natural Resources

## FY 1986 Budget

February 27, 1985

Mr. Chairman and Members of the Committee:

I am pleased to appear before you today, as the Secretary of the Interior, in support of the President's FY 1986 Budget for the Department. During my tenure as the Secretary of Energy and as Under Secretary of the Interior, I sought to establish a good working relationship with this Committee. Now, at the beginning of President Reagan's second term, I have been given the privilege of serving as Secretary of the Interior and of having the opportunity to work with you to resolve the critical resource issues confronting this Nation.

I have the good fortune of having some familiarity with the Department of the Interior. Having spent 21 months as Under Secretary, and having served for six years as Administrator of the Bonneville Power Administration, I recognize many of the current issue categories. However, I have to learn -- and in some cases relearn -- specifics. In that process, I look forward to working with the knowledgeable, dedicated professionals at the Department.

I believe the Nation is best served when we have a clear consensus on broad policies that govern the everyday actions of the Executive branch. The Nation is not well served by emotional confrontation or impasse on basic policy.

My goal at the Department is to build a national consensus on the broad policy issues which face the Department. I intend to do this by effectively communicating the Administration's priorities; consulting early and frequently with the Congress, State and local governments, and other interested parties; and striving to reach a consensus on the President's broad policy objectives:

- o conserving the Nation's national park, wilderness and wildlife resources;
- o enhancing America's ability to meet our energy and mineral needs with domestic resources;
- o increasing the supply of quality water resources;
- o improving the Federal Government's relationship with State and local governments; and
- o developing the economic and social resources of American Indians, Alaska Natives, and the people of the U.S. Territories.

Certainly I recognize there will be conflicts and controversies surrounding individual actions and peripheral issues -- that is the nature of the issues facing this Department. But, at the same time, I want to work closely with you in establishing the broad national resource policies that reflect the values, needs, and wishes of the American people.

The 1986 budget reflects not only the Administration's objectives, but also the overriding financial realities we face as a Nation -- a budget deficit which totals $180 billion. This deficit requires making, and through this budget we have made, difficult policy choices. Those choices have meant reducing or eliminating many programs which have produced tangible benefits and which, evaluated on their own merits in a different budget context, would be funded. The details of the budget have to be considered, however, not in isolation but, rather, in the context of the financial realities with which we must grapple. If there is consensus on one broad national policy, it is the need to reduce the deficit.

It is with this consensus regarding deficit reduction in mind that I have reviewed the Interior Department's budget and programs for FY 1986. This budget, $5.6 billion in budget authority and $6.2 billion in outlays, will allow us to exercise our stewardship responsibilities. The reductions of 15 percent in budget authority and 10 percent in outlays from the FY 1985 levels will require us to be more efficient and innovative in order to do all that we would agree is desirable. These reductions will require us to recognize more fully the appropriate role and responsibility of State and local governments and to cooperate more effectively with the private sector.

In addition, we are asking for total rescissions of $75.3 million of 1985 appropriations and 1985 supplemental appropriations of $7.6 million and transfers amounting to $46.2 million in 1985 and $4.9 million in 1986.

Without the Bureau of Indian Affairs budget, which is considered by the Select Committee on Indian Affairs, or the budgets for the Fish and Wildlife Service and John F. Kennedy Center, which are under the jurisdiction of the Environment and Public Works Committee, the FY 1986 request for programs under the jurisdiction of this Committee is $3.7 billion, a reduction of $835 million from the 1985 estimate of $4.5 billion.

The major elements accounting for a reduced Interior budget are as follows:

## Land Acquisition

It is our policy to continue acquisition of lands for park, refuge and wilderness purposes. The budget request we have before you will permit us to continue the most important acquisitions. We are proposing to defer other acquisitions for a three-year period. This three-year moratorium will save $148 million in 1986 in the Bureau of Land Management, Fish and Wildlife Service, and the National Park Service.

We believe this deferral will not impair the primary missions of the Department or affect ongoing operating programs. First, we are requesting $13 million for deficiencies, emergencies, and administrative costs.

Second, the Department will continue to emphasize the acquisition of lands through means other than Federal appropriations, for example, through donations and exchanges for parklands, wetlands, wildlife refuges and other recreation lands. During the past four years, over 10,000 acres of park lands have been acquired in this manner. In addition, nearly 1.1 million acres of refuge lands have been donated or acquired through exchange including 972,000 acres donated by Alaska for the Arctic National Wildlife Refuge.

Third, self-financing mechanisms, such as the Federal Duck Stamp Program, will continue to generate revenues to acquire lands for the National Wildlife Refuge System.

From 1981 through 1984, $517 million was obligated to acquire approximately 64,000 acres of park land, 242,000 acres of wetlands and other refuge lands, including 170,000 acres purchased through the Migratory Bird Conservation Account, and 16,000 acres of other recreational lands. Further funding for land acquisition amounting to $177 million is available with 1985 appropriations and Duck Stamp receipts, for a total investment of nearly $700 million through 1985.

## Water Programs

Providing an adequate supply of clean water is an important resource challenge facing all levels of government, local, State and Federal, in the coming decades. Although current supplies are adequate in most regions, conflicting demands for water are approaching the limits of what current development can supply at low cost. In some cases, groundwater supplies are being depleted or threatened by contamination. Water delivery and treatment systems in certain areas of the country are deteriorating. In other areas, more storage and delivery systems are needed.

This Administration, recognizing the primacy of State water law, has made a good start in addressing pressing water resource issues. We are now prepared, within existing resources and in close cooperation with the States, to develop a water management strategy in the national interest. This strategy must look at the issues of water quantity, quality, and cost, together, not as separate concerns.

It is imperative that we as a Nation revitalize the magnificent water development programs launched earlier in our history. The Federal-State partnership in water development has succeeded even beyond the dreams of those who developed the concept decades ago. This partnership has helped create abundant year-round water, electric and food supplies; reduced flooding; and provided vast new opportunities for water-related recreation.

I am committed to working with the Congress, the States, local entities, and the private sector to move forward in developing much needed, environmentally sound, and economically prudent water resource projects. We will continue to seek new partnership arrangements with States and other non-Federal interests in the financing and cost sharing of new projects, taking into account prior commitments.

An important contributor to our water program goals is the budget of the Bureau of Reclamation, which reflects outlays of about $1 billion in FY 1986. Within this total, construction outlays are projected at $700 million, the same level as 1985. Our budget authority request for this purpose is $532 million, a $205 million reduction below the 1985 estimate. This level of funding will contribute to our deficit reduction efforts, but at the same time maintain a viable reclamation program which has been of such vital importance in the development of the West.

This budget request provides for continuation of 57 projects already underway in 1985 and for three construction initiatives: the enlargement of Buffalo Bill Dam and Powerplant in Wyoming; construction of power generating facilities at Headgate Rock Dam for the Colorado River Indian Reservation in Arizona; and the construction and uprating of facilities at the Hoover Dam in southern Nevada. Preconstruction activities will be underway on two projects, the Narrows Unit and the Uintah Unit, and work will begin on one rehabilitation and betterment project, the Crooked River Irrigation District, and up to three safety of dams projects.

## Construction

The 1986 request for construction programs other than in the Bureau of Reclamation is $114 million, a reduction of $108 million from the 1985 estimate. The request provides for essential rehabilitation and repairs, including the correction of dam safety problems on refuges and Indian lands. Continued funding also will be provided for Indian water rights settlements, to provide needed employee housing at remote locations, and to provide essential utility improvements.

The funding reduction supports our deficit reduction goals, and, at the same time, in our view, is less harmful than disrupting ongoing operations. Most of the reduction occurs in two areas: first, in the National Park Service, a $61 million reduction and a 1986 level of $50 million is proposed, second, in the Bureau of Indian Affairs, where a $38 million reduction and a 1986 level of $70 million is proposed.

Further, as with land acquisition, it is important to consider that our FY 1986 construction program is proposed in the context of the slightly more than $1 billion obligated for this purpose in 1981-1984 and the fact that $245 million is available for this purpose in FY 1985. These large investments in prior years exemplified by the PRIP program, give us the opportunity to carry out programs effectively in FY 1986 at reduced levels of new appropriation.

## Interchange of Bureau of Land Management and Forest Service Lands

The 1986 budget reflects an Administration proposal to rationalize the management of certain lands administered by the Bureau of Land Management (BLM) and by the Forest Service (FS) of the Department of Agriculture. This proposal is consistent with the Administration's land management policy of establishing contiguous areas of public lands sufficient in size to achieve economies of scale, eliminate public confusion over management responsibility and facilitate public use. Currently, lands managed by these organizations are intermingled, necessary economies are not achieved, services are duplicated, and confusion regarding management policies exists.

The Administration's proposal -- which involves exchange of some 30-35 million acres of BLM and FS lands -- will require Congressional action. We are developing the plan for implementing this exchange in an open consultative fashion with Congress and all affected interests. I want to assure the Committee that no action will be taken without full public participation and consultation with the Congress.

Although this initiative will not produce immediate savings in 1986, it is expected to produce savings of $25-$30 million a year in the future. The budget proposes the Oregon and California Grant Lands be transferred to the Forest Service starting in 1986, resulting in a decrease of $54 million. This change will require legislative action.

## Grants and Shared Receipts for State and Local Governments

The proposed 1986 budget includes $1.2 billion for grants and direct payments to States, territories, and local governmental units, a reduction of $334 million below the current 1985 estimate. This level reflects an appropriate balance between State and Federal roles and responsibilities, and changing financial circumstances.

- o Funding requested for the Trust Territory of the Pacific Islands decreases by $85 million to $14 million because the budget assumes that the Congress will pass the Compact of Free Association affecting the Republic of the Marshalls and the Federated States of Micronesia by the beginning of FY 1986. Funds to support the Compact are included in the budget of the Department of State.

- o No funding is requested for State recreation grants from the Land and Water Conservation Fund. The savings will be $72 million. The large Federal deficit does not allow us to fund this program in 1986.

- o Abandoned mine reclamation grants are reduced by $44 million, as compared to the current FY 1985 estimate of $255 million, to $211 million. Because recent appropriation levels have significantly exceeded receipts, a reduction is proposed to better align financing and assure support to the States throughout the life of this program. Moreover, the States have not yet used a large portion of funds made available to them in prior years. At the end of FY 1984, nearly $372 million was not obligated at the State level, and an additional $258 million was appropriated for State grants in FY 1985.

- o As part of the BLM/Forest Service interchange, payments to counties of shared receipts from the Oregon and California grant lands and other public lands in Western Oregon will appear in the Forest Service budget, reducing the Department's payments by $73 million. Again, no action will be taken on the proposal without communication and consultation with the Congress and interested parties.

- The budget includes a proposal that, beginning in 1986, the Federal government's costs of managing and administering mineral leasing programs be deducted from royalty revenues and that the States' shares (generally 50 percent) be computed based on the resulting net amount. At present, State shares are computed based on gross revenues, after the deduction of windfall profit taxes.

  Under this proposal, the States, as direct beneficiaries of a portion of the mineral leasing receipts, are being asked to share equitably in the costs of producing and collecting these receipts. Without such cost sharing, the States are, in effect, receiving more than their "fair share" of these revenues. Savings to the Federal government in 1986 from this proposal result in a reduction of $54 million in the Payments to States under the Mineral Leasing Act account. This reduction amounts to slightly more than ten percent in the funding that States would otherwise receive. Total receipts for mineral leasing are estimated at slightly over $1.0 billion in FY 1986, and Federal costs are approximately ten percent of that amount.

- The Department will continue to provide compensation to local governments for costs resulting from Federal lands within their jurisdictions. Funding for Payments in Lieu of Taxes is proposed to increase by $2.1 million in 1986 to $105 million. Payments to counties from the National Wildlife Refuge Fund will amount to $9.9 million in 1986. The payment is comprised of receipts from revenue-generating activities on refuges and from appropriated funds. The appropriated amount ($5.6 million) remains at the 1985 level, while available receipts in 1986 ($4.3 million) are slightly less than in 1985.

## Reductions in Costs of Administration and Personnel Compensation

The Department's request reflects a ten percent reduction in headquarters and administrative expenditures consistent with the President's overall budget policy. The reduction is designed to promote efficiencies and result in savings which do not have a negative impact on program operations. The reduction applies to all but two bureaus, the Office of Surface Mining (OSM) and the Bureau of Indian Affairs (BIA). No reduction is proposed for OSM because of a growing programmatic workload over the past several years. For BIA, a five percent rather than a ten percent reduction is proposed because since 1981 significant administrative savings have been realized at Area and Central Offices. Department-wide, the ten percent reduction amounts to nearly $44 million in savings. In addition, the proposed five percent reduction in Federal pay will realize an additional $71 million in savings in FY 1986.

The ten percent reduction in headquarters and administrative expenditures continues the direction of the Department in management improvements begun during recent years. The reduction is designed to promote efficiencies and result in savings which do not have a negative effect on program operations.

Other program changes in the 1986 budget request include the following:

## Sport Fish Restoration (Dingell-Johnson)

The 1986 budget includes an increase of $6 million, or more than 15 percent, above the 1985 level of $38 million for a total of $44 million for sport fish restoration program grants to States and would make amounts available to States through annual rather than permanent appropriations. The FY 1986 budget, however, would not disburse the additional $77 million from import duties on pleasure boats and motor boat fuel taxes. These funds will be placed in the Aquatic Resources Trust Fund.

We recognize the potential value of disbursing the full amount of funds called for by the Wallop-Breaux amendments to the Deficit Reduction Act and, in fact, we earlier supported these amendments. The Federal deficit, however, does not permit us to advocate an increase of this magnitude at this time. Nonetheless, because of the importance of this program, we are proposing the $6 million increase.

## National Park Restoration and Improvement

As the result of information developed in part by the General Accounting Office, we became aware of significant health and safety problems in the National Park System. Accordingly, working with the Congress, the Department invested over $1 billion from FY 1982 through 1985 under the Park Restoration and Improvement Program (PRIP) to repair visitor use facilities and strengthen the maintenance and resource management programs of the National Park Service. Virtually every park will have been affected significantly by PRIP.

With the completion of this very large investment, the 1986 budget for maintenance, repair and rehabilitation, cultural resource preservation, and construction programs is being funded at a level which will provide for essential maintenance and improvement projects and should prevent the development of maintenance and repair backlogs which occurred in the past. The Park Service is developing a maintenance management system that will identify and sequence maintenance and rehabilitation activities to avoid the necessity for a PRIP-type program in the future.

## Recreation User Fees

The Administration is proposing a government-wide initiative to adjust recreation user fees in order to reflect better the Federal cost of providing recreation opportunities to the public. The objective of this initiative is to partially offset costs and increase receipts by about $39 million to a level of about $62 million in FY 1986. At present, National Park Service entrance fees are frozen at 1979 levels, and the number of units where fees can be charged is sharply limited. Without this initiative, approximately $23 million would otherwise be collected in FY 1986.

To implement this initiative, we will propose legislation and appropriation language to amend existing prohibitions on establishing or increasing recreation fees. These proposals will allow for the resulting revenues to be retained by the collecting bureau for appropriation in future fiscal years to offset the costs of operation and maintenance of Federal recreation facilities. We will work closely with the Congress and interested private sector organizations to develop this proposal. I am hopeful that effective communication and early and frequent consultation will provide the necessary consensus on this issue.

## Grazing Fees

Grazing fees on public rangelands are set annually based on the grazing fee formula contained in the Public Rangelands Improvement Act (PRIA). The PRIA formula was established for a seven-year trial basis that ends in February 1986. This legislation also directs that the Secretaries of the Interior and Agriculture report to the Congress on their evaluation of the PRIA formula and other grazing fee options. A draft of this report is scheduled to be released for public comment in the near future.

For budget estimating purposes only, the 1986 budget projects a total increase of $11 million in BLM grazing receipts. The Administration's specific findings regarding future grazing fees will be made available to the Congress in a report to be submitted later this year.

## Outer Continental Shelf Program

In addition to generating substantial revenues, continued exploration and development of the energy resources of the Outer Continental Shelf (OCS) can contribute to the Nation's objective of reducing our dependence on foreign energy sources. I will do all I can to see that the Department resolves conflicts early in the OCS leasing process and avoids needless controversy while carrying out our mandate under the OCS Lands Act. I am committed to continuing negotiations with the appropriate Congressional, State, and local officials so that blanket OCS moratoria no longer are necessary.

While I understand the reasons for previous legislative moratoria on certain OCS lease areas, these actions impede achieving the mandate Congress gave the Interior Secretary under the 1978 OCS Act Amendments. The Congress stated in the FY 1985 Appropriations Conference Report that such moratoria would no longer be imposed if the Department's consultation with the States and localities gives proper consideration to all resource values and Defense needs, and results in protection of environmentally sensitive areas. Let me assure you the Department will communicate clearly and consult and cooperate with all affected parties to achieve these ends.

## Receipts

Because of the revenues generated by our mineral leasing programs, particularly our offshore programs, the Department's total receipts have traditionally outpaced the size of the budget, and FY 1986 is no exception. These receipts are estimated to be $10.4 billion in 1986, a $2.9 billion increase over the current estimate for 1985. This anticipated increase results principally from an assumption that there will be a resolution of disputes over the sharing of oil and gas revenues from Section 7 and 8g tracts with non-litigating States, and that this resolution will result in the anticipated release in 1986 of funds now held in escrow.

Of the $10.4 billion in total receipts, about $8.3 billion is related to the OCS program, including nearly $1 billion in interest related to the escrow payments cited above. Another $1.2 billion is related to onshore leasing of oil, gas, coal, and other minerals. The remaining $.9 billion results largely from such items as timber, grazing, recreation, and mined land reclamation fees.

## Staffing Levels

The 1986 President's Budget includes a full-time equivalent (FTE) staffing level of 70,748 -- a reduction of 2,496 FTEs from the 1985 level. A major portion of the reduction (1,123) is related to the interchange between the Bureau of Land Management and the Forest Service (which will receive additional FTEs to accomplish its expanded responsibilities). Of the reduction, 908 FTEs result from Department-wide management improvement initiatives.

## FY 1985 Rescissions, Supplementals, and Transfers

We are proposing several actions affecting FY 1985 appropriation levels, as follows:

- Rescission of a total of $75.3 million, including $42.4 million in response to the Congressional requirements of Section 2901 of the Deficit Reduction Act of 1984 (P.L. 98-369). These reductions affect travel, motor vehicles, public affairs, consultant services, printing and audiovisual activities. We are also requesting rescission of $2.9 million within the Abandoned Mine Reclamation Fund. These funds were intended as a reclamation grant for Tennessee, but only States with approved regulatory programs are eligible for such grants. Finally, the budget requests permanent rescission of $30 million in contract authority available to the National Park Service for the Land and Water Conservation Fund for acquiring land in advance of appropriations.

- Supplemental appropriations requests of $7.6 million, including $4.8 million for the Office of Surface Mining to carry out regulatory responsibilities in Tennessee and an enhanced program of civil penalties and alternative measures to enforce the Surface Mining Control and Reclamation Act; $2.0 million for an inflation adjustment for certain grants to the Northern Mariana Islands; and $0.8 million for payment of interest to States as the result of late payment of mineral leasing revenues.

- Transfers of $25.1 million to reimburse a portion of the costs incurred in 1984 for fire fighting and related costs.
- Transfers of $18.6 million to cover a portion of the costs of the January 1985 Federal pay raise. The remainder, $40.2 million, is being absorbed within current appropriations.
- A significant amount of the funding proposed for transfer ($38.2 million) is from the Cumberland Gap Tunnel project, which is proposed for cancellation because of its high cost and the large Federal deficit.
- In addition, with the completion of the Park Restoration and Improvement Program one year ahead of the original schedule, none of the $100 million in contract authority from the Highway Trust Fund for National Park Service roads and parkways is being requested for 1986. Accordingly, this contract authority is proposed for rescission in the Federal Highway Administration budget in order to reduce Federal outlays.

I would now like to discuss some of the key highlights of the 1986 budget request for each bureau.

## Bureau of Land Management

The Bureau of Land Management (BLM) is responsible for the conservation, management and development of 310 million acres of public lands, including 138 million acres in Alaska. BLM also has responsibility for mineral leasing and supervision of minerals operations on about 370 million additional acres of Federal mineral estate underlying other ownerships.

The total 1986 budget for the Bureau of Land Management, including permanents and trust funds, is $501 million, a decrease of $156 million from the 1985 estimate. This reduction primarily reflects the proposed transfer of the Oregon and California grant lands program to the Forest Service (-$127 million); the completion in 1985 of the acquisition of the private mineral estate in the Cranberry Wilderness area (-$15 million); and the return to the 1984 level of funding for the wild horse and burro program (-$11 million).

Special emphasis is given in BLM's budget to the programmatic priorities of the Department. These include increased responsiveness and professionalism in managing Federal minerals, management of high value recreation areas, establishment of new partnerships and cooperative endeavors in natural resources management, and continued improvements in agency management practices. Funding priority has also been placed on those programs which protect existing public investment in facilities and resource projects, respond to regional and local economic needs, and ensure both visitor and resource protection.

The 1986 request includes additional funds for energy and minerals management for review and classification of known geological structures, additional post-lease work for both fluid and solid minerals, and cooperative inspection agreements with States and Indian tribes. The budget also requests increases for eradication of illegally grown marijuana from the public lands and for improvements in BLM's ability to detect and suppress wildfires in their early stages.

Decreases are proposed in funding for land and realty operations, wild horse and burro removals, forest management, wildlife habitat management, soil, water and air management (except hazardous materials), and cadastral survey programs. These decreases are possible in part because of the Bureau's continuing efforts to encourage private investment and voluntarism and to work with State and local governments and private users to share in the funding and administration of various activities of predominantly local interest. For example, we are proposing to recover a greater proportion of costs associated with rights-of-way applications consistent with the benefits afforded the applicants.

The budget includes $105 million for the Payment in Lieu of Taxes (PILT) program for payments to local units of government containing Federal lands, an increase of $2.1 million over 1985. No new funding is requested for land acquisition or construction projects because of the deficit and progress made as a result of past funding. Subject to Congressional approval, it is anticipated that receipts from the use of recreation facilities will increase and that grazing fees will be increased as a result of the study now underway.

At this point, I'd like to mention the need for consensus in implementing an effective Federal coal leasing program, a subject of controversy for over a decade and a half. Coal accounts for more than 85 percent of the recoverable fossil fuel reserves in the United States, and about one-third of those reserves occurs under Federally held land. If coal is to make a proper contribution to the balanced and mixed energy resource base of the Nation, the Secretary of the Interior must help build a national consensus on how to achieve an environmentally sound Federal coal leasing program.

Consistent with this objective, the Department has been consulting extensively with the States, industry, environmental groups and the Congress in a carefully planned effort to implement all but one of the recommendations of the Commission on Fair Market Value for Federal Coal Leasing. In particular, I would like to note that the Regional Coal Teams and the Federal-State Coal Advisory Board have been rechartered, and their respective roles in guiding leasing policy have been strengthened.

Also, a draft environmental impact statement covering the coal leasing program was released for public comment on February 8, 1985. The final statement is scheduled for publication in July, 1985.

For planning purposes, the budget assumes that one regional sale and 20 emergency sales will be held in 1986; however, the actual number of regional sales to be held will depend upon the recommendations of the Regional Coal Teams.

## Minerals Management Service

The Minerals Management Service (MMS) has responsibility for leasing and supervising the development of mineral resources on the Outer Continental Shelf (OCS) and for collecting and accounting for royalties and other mineral revenues due from Federal and Indian leases. As one of the largest collectors of revenue for the Federal Government, MMS will collect and account for $6.9 billion in Federal receipts in 1986, including $5.8 billion from OCS bonuses, rentals and royalties and $1.1 billion from onshore mineral leasing. In addition, 1986 receipt estimates assume that $2.5 billion in principal and interest will be released from escrow.

In addition to generating these revenues, continued exploration and development of the energy resources of the Outer Continental Shelf can contribute to the Nation's objective of reducing our dependence on foreign energy sources. I will do all I can to see that the Department resolves conflicts early in the OCS leasing process and avoids needless controversy while carrying out our mandate under the OCS Lands Act. I am committed to continuing negotiations with the appropriate Congressional, State, and local officials so that blanket OCS moratoria no longer are necessary.

While I understand the reasons for previous legislative moratoria on certain OCS lease areas, these actions impede achieving the mandate Congress gave the Interior Secretary under the 1978 OCS Act Amendments. The Congress stated in the FY 1985 Appropriations Conference Report that such moratoria would no longer be imposed if the Department's consultation with the States and localities gives proper consideration to all resource values and Defense needs, and results in protection of environmentally sensitive areas. Let me assure you the Department will proceed with full communication, consultation and cooperation with all affected parties to achieve these ends.

The 1986 budget request for Minerals Management Service program operations is $154 million, a reduction of $6.6 million from the 1985 estimate.

Within this overall decrease, a reduction of $4.8 million is related to the acquisition of pre-lease geologic and geophysical data for the OCS leasing program; in 1986 and thereafter, data will continue to be acquired as a condition of permit but the Federal government will pay only the cost of reproduction. Our position is that the Government should pay for only those additional costs which industry incurs in providing these data to MMS. This change would also treat permittees the same as lessees with regard to reimbursement for acquired data.

The MMS royalty management program reflects a decrease in FY 1986 for computer systems, pending a Departmental reappraisal. We are currently undertaking a thorough review of our royalty collection system. The review is being carried out in cooperation with Congress under the direction of the Department's Information Resources Management Review Council, chaired by the Under Secretary. This council is composed of top Departmental managers and makes recommendations to the Secretary concerning ADP policy, procurement and systems review. I expect that the recommendations resulting from the review will enable us, after consultation with the Congress, the affected States, industry, and others, to improve the system significantly.

The 1986 budget also proposes to phase out the Royalty-in-Kind program. The continued costs resulting from operation of this program and from related litigation can no longer be justified in light of the decreasing number of participating refiners and the prevailing and expected conditions in the petroleum markets.

These decreases in the Royalty Management Program are partially offset by an increase for revenue collection activities. Within the 1986 request, funds will be redirected to provide for additional helicopter services for the Gulf of Mexico inspection program and additional funding for cooperative and delegated audits by States and Indian tribes.

The MMS budget also includes a permanent appropriation for payments to States from onshore mineral leasing receipts. The 1986 estimate of $479 million for this account reflects the proposal discussed earlier that recipients of mineral leasing revenues share in the costs of realizing those revenues. Currently, after the deduction of windfall profit taxes, States generally receive 50 percent of these revenues without deduction of any of the Federal costs of managing these programs. The 1986 budget proposes to deduct Federal program costs from gross receipts before calculating the State share of these revenues. Under the proposal, the States, as direct beneficiaries of a portion of the mineral leasing receipts, are being asked to share equitably in the cost of producing and collecting these receipts. Without such cost sharing, the States are, in effect, receiving more than their "fair share" of these revenues. This cost sharing proposal would reduce the Federal deficit by approximately $54 million in 1986 and by $290 million through 1990.

I believe this proposal for cost sharing is justifiable given the Administration's objective of developing a stronger partnership with State and local governments. A true partnership means sharing both the benefits and the costs of efficient resource management. It should also produce a closer scrutiny by the States of the efficiency and effectiveness of our program management.

## Office of Surface Mining Reclamation and Enforcement

The Office of Surface Mining Reclamation and Enforcement (OSM) administers programs for the regulation of coal mining operations to protect the environment and for reclaiming lands damaged by past mining activity. OSM reviews, monitors, and assists State regulatory and reclamation programs to accomplish these objectives. OSM also carries out regulatory and reclamation activities in States which do not have approved programs and on Federal and Tribal lands.

The 1986 budget estimate for OSM is $330 million, a decrease of $43 million from the 1985 estimate. In 1985, a supplemental appropriation request of $4.8 million includes $2.6 million for Federal regulatory operations in Tennessee, which relinquished all of its regulatory responsibilities on October 1, 1984. It also includes $2.2 million to augment systems for the assessment and collection of civil penalties and the use of alternative enforcement measures consistent with an out-of-court settlement of two recent Federal court orders. Also proposed is a rescission of $2.9 million for the 1985 State reclamation grant that was intended for Tennessee, because only States with primacy are eligible for reclamation grants.

In 1986, OSM will continue to support and provide incentives for States to maintain and improve their regulatory and reclamation programs. These incentives include, within the Regulation and Technology (R&T) account, $38.1 million for State regulatory program grants, an increase of $1.4 million. These grants cover 50 percent of the costs of operating State regulatory programs. The remainder of this account, $41.8 million, for a total R&T request of $79.9 million, provides for Federal program operations, technical services, research and general administration.

Within the Abandoned Mine Land (AML) account, OSM is requesting $211.2 million, a decrease of $43.6 million from the 1985 estimate, for non-matching grants to reclaim abandoned mine lands. This decrease is proposed because expected receipt levels over the remainder of the program will support a constant annual level of approximately $211 million. Alternatively, if higher appropriations are made in 1986, large reductions in the annual appropriation levels will have to be made in future years.

In addition, as of the end of FY 1984, only 30 percent or $157 million of the $529 million in cumulative reclamation grants has been obligated by the States. Given the unobligated carryover into FY 1985 of $372 million, plus the very high appropriation level of $258 million in 1985, I believe the requested appropriation level for 1986 is adequate.

The remainder of this account is funded at $39.1 million, for a total AML request of $250.3 million. Included in this amount is a $3.0 million increase for Federal reclamation work on tribal lands and States without approved reclamation programs.

Other changes include a decrease of $6.4 million for the Rural Abandoned Mine Program (RAMP) administered by the Soil Conservation Service of the Department of Agriculture. The $3.4 million requested for RAMP will be sufficient to continue administering projects initiated in prior years. The Administration continues to advocate reducing the number of delivery systems for reclamation projects. We strongly encourage the States to perform most of the reclamation work, and to the extent that RAMP type projects are viewed as high priority by the States, they will use their grant money to fund them. Finally, $3.1 million is requested for the Small Operator Assistance Program.

**Bureau of Reclamation**

The Bureau of Reclamation plans, develops, constructs, and operates water resource projects in 17 Western States. The purpose of these programs is to provide irrigation water service, municipal and industrial water supplies, hydroelectric power generation, outdoor recreation and flood control which help stabilize and stimulate local and regional economies. Projects also contribute to environmental protection efforts through their water quality improvement and fish and wildlife enhancement features.

I am committed to working with the Congress, the States, local entities, and the private sector to move forward in developing much needed, environmentally sound, and economically prudent water resource projects. We will continue to seek new partnership arrangements with States and other non-Federal interests in the financing and cost sharing of new projects, taking into account prior commitments. Within these guidelines, we should be able to improve our program to meet America's current and impending water needs while recognizing Federal budgetary realities.

In addition, by carefully following the President's water policy, we expect to be able to reduce Federal spending now and in future years while still moving forward to meet our Nation's water needs. Negotiating cost-sharing arrangements for each project has proven to be a rational, successful approach to financing project construction. The States have shown their willingness to provide appropriate levels of funding, and the Congress has approved a number of cost-sharing arrangements over the past year, particularly in the planning programs. Under these arrangements, project beneficiaries will bear a part of the cost of financing new project development with their share worked out on a case-by-case basis. Safety problems at Reclamation dams will be corrected as expeditiously as possible in accordance with the Reclamation Safety of Dams Act which requires that 15 percent of the cost for certain project purposes must be reimbursed.

The 1986 budget request of $840 million represents a decrease of $216 million from the $1,056 million 1985 estimate. The major decrease occurs in the Construction Program for which $532 million is requested, $205 million below the 1985 estimate. The $205 million is the decrease in budget authority necessary to freeze construction outlays at the 1985 level of approximately $700 million, thus contributing to the President's deficit reduction program.

The budget request for the Construction Program provides for continuation of 57 projects already underway in 1985 and for three construction initiatives: the enlargement of Buffalo Bill Dam and Powerplant in Wyoming; construction of power generating facilities at Headgate Rock Dam for the Colorado River Indian Reservation in Arizona; and the construction and uprating of facilities at the Hoover Dam in southern Nevada. Preconstruction activities will be underway on two projects, the Narrows Unit and the Uintah

Unit, and work will begin on one rehabilitation and betterment project, the Crooked River Irrigation District, and up to three safety of dams projects.

A portion of the reduction in Construction funding can be accommodated because construction prerequisites on some projects, including the Central Utah and Central Valley projects, have not progressed as expected. On other projects, including Columbia Basin, Dolores and some rehabilitation and betterment projects, work is closer to completion and program requirements have diminished accordingly. While we anticipate that some projects will be delayed at this level of funding, we are confident that we can manage our construction program to minimize any disruptions and may, in fact, be able to complete some work on schedule.

The request for the Loan Program is $41 million, a decrease of $26 million compared to 1985 as 18 projects will be completed in FY 1985. The 1986 funding level will still provide for the continuation of 11 projects and permit work to begin on six projects.

The 1986 estimate for the General Investigations program is $32 million, a decrease of $4 million. This program provides for investigations and engineering and scientific studies of potential projects for the conservation and utilization of water and related land resources. Within the $32 million, $2.5 million is included for new advance planning studies and new plan formulation investigations that are important in assisting Western States to meet their water and energy needs. These new studies are consistent within a reduced appropriation level because they embody the President's new cost sharing policy. State and local beneficiaries will contribute more than $2.5 million to match the proposed Federal funding.

The budget request for operation and maintenance of Reclamation-constructed facilities is $133 million, a $15 million decrease from the 1985 estimate, of which $13.7 million relates to a change in financing for operation and maintenance of the Boulder Canyon Project. Power revenues and payments from local organizations will finance $31 million in operation and maintenance at Boulder Canyon in 1986 through a permanent appropriation in the Colorado River Dam Fund.

## Geological Survey

The major missions of the Geological Survey (GS) are to undertake research, fact finding, and mapping aimed at enlarging the Nation's knowledge of the extent, distribution, and character of its natural resources, and about the geologic processes, structure, and hazards that affect the development and use of the land and the physical environment.

The 1986 budget request for the Geological Survey is $407 million, a decrease of $2 million from the 1985 estimate of $409 million.

The 1986 estimate includes $93.3 million ($83.8 million of appropriations and $9.5 million of estimated receipts from map sales) for the national mapping program. Within this total, increases are requested for digital cartography to meet the target date of mid-1987 for the 1:100,000 scale digital data base required by the Bureau of Census for the 1990 decennial census. Funds also are requested to further the transition from the existing analog cartographic production system to an advanced digital system which will take advantage of emerging computer technologies. A decrease is proposed for the land-use and land-cover mapping program, and the side-looking airborne radar program is proposed for elimination because the technology has been demonstrated and applications data can be acquired from the private sector as needed.

The Survey's budget also includes $166.0 million for geologic research and investigations. I am pleased to say that we are increasing funding in 1986 for several high-priority research initiatives. An increase is proposed for deep continental studies to provide a better understanding of deep crustal environments and the processes that produce initial ore deposits as well as earthquakes, volcanic eruptions, geothermal fields and hydrocarbon accumulations. Another initiative addresses the need to develop an information base for the Exclusive Economic Zone (EEZ), which contains nearly 3.4 million square nautical miles of largely unexplored frontier. The expanded effort will accelerate the development of an inventory of the resources of this vast area.

Additional funds are also requested to support mineral resource studies in national forests including wilderness and roadless areas. Funds requested for the world energy resource assessment program will enable completion of a world-wide natural gas assessment and evaluation of the energy resource potential of Latin America and Asia. Decreases are proposed for geologic hazard surveys and energy geologic surveys, principally because of one time expenditures for equipment in 1985 and decreases in industry requirements for uranium and geothermal resources.

The 1986 estimate includes $129.5 million for investigations to survey and appraise the Nation's water resources and to assure the availability of the water data necessary to develop and manage these resources. This funding level will enhance the collection and monitoring of water-quality and water-quantity data via the national water network collection systems. Additional funding is provided for rehabilitation of network stations and more frequent sampling and data analysis. Increased funding is requested to accelerate essential research on the impact of toxic/hazardous substances on surface waters and sediments.

A program increase of $1.0 million is requested for the data collection and analysis activity of the Federal/State Cooperative program (where funding is matched by State and local cooperators) to augment technical assistance on ground-water contamination and help guide decisions on ground-water protection. Total funding for the cooperative program in 1986 is $50.7 million. A decrease of $1.0 million is proposed for the State water resources research institute program. While the Federal coal hydrology program is proposed for elimination, there is $4.2 million in the Federal/State Cooperative program for coal hydrology studies.

## Bureau of Mines

The Bureau of Mines helps ensure that the Nation has adequate and dependable mineral supplies for economic, security and other needs. Research is conducted to provide the technology for the extraction, processing, use, and recycling of the Nation's mineral resources at acceptable social, environmental, and economic costs. The Bureau also collects, analyzes, and publishes statistical and economic information on all phases of mineral resource development and analyzes the effects of public policy alternatives on mineral supply and demand.

The total Bureau of Mines budget, including trust funds, is $105 million for 1986, a decrease of $30 million from the current 1985 estimate. This decrease will mean that research efforts lacking promise of substantial further benefits or which can be performed by the private sector will be terminated at the end of FY 1985. Basic research on a select number of high-priority topics will be pursued in 1986. The request includes $58.8 million for research in all phases of mining and mineral extraction and recycling; $27.0 million for the collection and analysis of data on minerals; and $18.5 million for general administration.

Funding is not being requested for the 31 Mineral Institutes, resulting in a savings of $7.8 million. The Institutes, along with five Generic Minerals Technology Centers, will have sufficient funds from the 1984 and 1985 appropriations to support their programs through 1986. From FY 1978 through FY 1985, approximately $65 million was provided to the Institutes as seed money. Many of the Institutes have demonstrated continued success in attracting funds for instruction and in obtaining research support through State appropriations for universities and through State agencies and private sources. In the future, it is our intention that the Institutes continue to rely on funds from the States and industry and on successful competition for Federal contracts and grants.

## Fish and Wildlife Service

Although the Fish and Wildlife Service is not primarily under the jurisdiction of this Committee, I would like to discuss it here in order to provide a comprehensive view of our budget.

The mission of the Fish and Wildlife Service is to conserve, protect, and enhance certain fish and wildlife and their habitats. The Service manages the national wildlife refuge system of 424 units, 150 waterfowl production areas, and 58 management areas on nearly 90 million acres. In addition, the Service manages 73 fish hatcheries throughout the country.

Fish and wildlife resources are a vital part of our national heritage. I pledge to continue protection of our wildlife refuge system and to conserve these resources with particular emphasis on the recovery of endangered species.

The total 1986 budget for the Service, including permanents and trusts, is $516 million, a decrease of $72 million below the 1985 estimate. The request for Resource Management, the Service's principal operating account, is $298.7 million. This is $2.5 million below the 1985 estimate, primarily as a result of anticipated savings from management efficiencies and programmatic decreases related to the completion or phasing down of ongoing activities during 1985. For example, the operations phase of a cooperative program to determine the effects of liming on acidified surface waters will be completed in 1985, for a savings of $2 million, although research on the effects of acid precipitation will continue.

The funding level for Resource Management includes $5.6 million, an increase of $1.2 million above the 1985 level, to initiate or expand activities at eight mitigation facilities under the Lower Snake River Compensation Plan. In addition, the request includes $1.1 million to address the issue of lead/non-toxic shot. The use of lead shot for waterfowl hunting has been controversial for many years. Recent discussions among Federal and State agencies, private conservation groups, and industry representatives have recognized the need to resolve outstanding questions and to establish a basis for making objective decisions on future non-toxic shot zones. Funding in FY 1986 will allow for site monitoring to determine locations on national wildlife refuges and other areas identified by the States where the use of lead shot threatens waterfowl resources and for establishing non-toxic shot zones when appropriate; research addressing waterfowl toxicity and crippling losses in waterfowl resulting from lead shot; and informing the public about lead poisoning in waterfowl. Close cooperation with States, private organizations and industry is essential to complete these activities.

Support for the operation and maintenance of national wildlife refuges will total $101.6 million and will continue funding for Accelerated Refuge Maintenance Management (ARMM) at the 1985 level of $17.2 million. ARMM was initiated in 1984 to address serious maintenance needs of refuges. ARMM has been successful in addressing these needs which include, for example, the maintenance and improvement of habitat and the rehabilitation of roads, dikes and visitor facilities. ARMM funds are reallocated annually based on a system of national priorities to meet requirements for major maintenance projects.

Funding for fish hatchery operation and maintenance will total $23.9 million; the budget does not anticipate the closure or transfer of any hatcheries.

The 1986 construction request for the Fish and Wildlife Service totals $5.6 million compared to $24.3 million appropriated in 1985. About $2 million of the request is for dam safety. The remaining funds will be used for projects on refuges, at hatcheries and research laboratories, and for the continuation of advance construction planning. The request places the highest priority on projects addressing health and safety issues. Other lower priority construction projects can be deferred, consistent with our overall deficit reduction goals, without having an adverse impact.

During the past five years, considerable resources have been made available to the Fish and Wildlife Service for land acquisition. For example, between 1981 and 1984, $73.3 million has been obligated from the Migratory Bird Conservation account to acquire more than 170,000 acres of important migratory bird habitat. During the same period, $70.7 million from the Land and Water Conservation Fund (LWCF) has been used to acquire more than 72,000 acres of other valuable refuge lands. Also, nearly a million acres have been added to the refuge system in Alaska by donation from the State. Moreover, in 1985, $37.6 million in new Migratory Bird Conservation funds and $63.2 million from the LWCF are available to continue these acquisitions. Also, $16.4 million in revenue from the sale of duck stamps will also be available in 1986 to acquire an estimated 18,500 additional acres. In addition, we will use exchanges and donations to continue to acquire new lands. However, as discussed earlier, because of these accomplishments and because of the large Federal deficit, the 1986 budget proposes a three-year moratorium on new acquisitions.

As I mentioned previously, recent amendments to the Federal Aid in Sport Fish Restoration Act (the Dingell-Johnson Act) will expand grants to States for these programs. The budget projects an increase of $6 million or over 15 percent above the 1985 level of $38 million for these grants. The increase will be derived primarily from additional excise taxes allowed under the legislative amendments. However, in an effort to limit Federal spending during a time of high deficits, the budget, subject to Congressional approval, does not make available to the Sport Fish Restoration account other revenue of approximately $77 million derived from motorboat fuel taxes, previously allocated to the Land and Water Conservation Fund, and import duties on pleasure boats. These reallocated funds will go into the Aquatic Resources Trust Fund. Finally, the budget proposes to make revenue available to the States under this program subject to the annual appropriation process.

## National Park Service

The National Park System contains 334 areas which cover 79.4 million acres of land in 49 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and the Northern Marianas. The National Park Service has the dual responsibility of protecting the natural and cultural resources of these areas and of providing for their use and enjoyment by the public. The Service also conducts a variety of programs which promote and assist outdoor recreation planning, preservation of cultural and natural resources, and environmental compliance and review among other Federal agencies, State and local governments, and private organizations.

The National Park System is one of our great national treasures, which I have pledged to protect. As Secretary of the Interior, as I stated at my confirmation hearings, I will not consider, I will not support and I will not permit development activities such as mining, drilling or timber harvesting in the national parks.

The total 1986 budget request for the National Park Service, including permanents, trusts, and proposed transfers, is $688 million, a decrease of $239 million from the 1985 estimate. Following the successful completion of a four-year initiative which resulted in the investment of more than $1.0 billion in the restoration and improvement of park facilities, funding for maintenance and preservation projects is being reduced in 1986.

The 1986 budget also includes decreases for National Recreation and Preservation Programs, Construction, Land Acquisition and State Assistance. The Federal government has provided funding and technical support to the States to help establish effectively functioning preservation programs. This support is no longer necessary. Accordingly, no funds are requested for matching grants to States from the Historic Preservation Fund, a decrease of $25.5 million from 1985. An increase of $2.6 million is proposed for the Visitor Facilities Fund to utilize estimated revenues available for the repair of government-owned concession facilities.

The 1986 request for the Operation of the National Park System appropriation is $585.7 million, a net decrease of $18.6 million from the 1985 estimate. The largest decrease, $24.5 million, is in park maintenance and preservation projects because of the successful completion of maintenance and restoration activities under PRIP as noted above. The remaining decreases include: $15.1 million in reduced pay costs resulting from the proposed five percent decrease in Federal salaries; $6.1 million resulting from the consolidation and improvement of headquarters and administrative operations and improved position management; and $1.4 million in reduced support to a number of private artistic and cultural facilities in the National Capital area.

These decreases are offset in part by increases of $14.3 million resulting from the January 1985 Federal pay increase and $6.3 million for fixed administrative expenses.

The 1986 request for National Recreation and Preservation is $9.3 million, $1.8 million less than the 1985 estimate. In order to help reduce Federal spending, the Administration proposes that direct support of public recreation programs be reduced. Accordingly, reductions are proposed in technical assistance to State and local governments for their recreation programs, and no funding is provided for technical assistance to States for river conservation programs. Funding reductions in Federal rivers and trails studies are possible since some studies will be completed and new studies are not being proposed.

The proposed budget for construction is $49.5 million, a decrease of $61.6 million. During 1982-1985, as part of PRIP, $431 million was invested in construction to meet high-priority construction needs, primarily for health and safety projects to correct deficiencies identified by both the General Accounting Office (GAO) and the Department. Because most of these health and safety projects have been completed, as noted by GAO in a recent report, construction for 1986 is budgeted at a lower level than during the PRIP years. Funding is included for 15 projects in 11 parks, primarily to correct health and safety deficiencies and to provide adequate housing for employees at two remote parks in Alaska.

During the 1981-1984 period, the Park Service obligated over $365 million to acquire nearly 64,000 acres of park land, and more than 10,000 acres were acquired by donation or transfer. An additional $66.8 million is available for acquisition in 1985. To help reduce the Federal deficit, the budget proposes a three-year moratorium on most acquisitions of new Federal park lands and eliminates State recreation grants. Accordingly, the 1986 budget request for Land Acquisition is $11.3 million, a decrease of $135.9 million from the 1985 appropriation. Of this total, $5.0 million will be available for emergency and hardship acquisitions and to pay deficiencies and relocation claims from court settlements. Remaining funds will be used to administer ongoing acquisition actions and to administer the close-out of State matching grants awarded in prior fiscal years.

No budget authority is requested for grants from the Historic Preservation Fund. Direct Federal support for historic preservation will be limited to those properties which are part of the National Park System. The Administration has taken steps to encourage private sector involvement in historic preservation through the enhancement of economic and tax incentives which have been highly successful. In 1984 alone, tax credits are estimated to have totaled $255 million. Since the beginning of FY 1981, the private sector has invested about $7.0 billion in over 9,000 preservation projects that qualify for tax credits.

The 1986 request for the Visitor Facilities Fund is $8.5 million. This account utilizes revenues collected from concessioner franchise and building use fees in prior years to restore and repair concessioner-operated facilities owned by the National Park Service. The appropriation requested is based on the estimated available revenues for 1986.

## Bureau of Indian Affairs

Although the Bureau of Indian Affairs programs are not under the jurisdiction of this Committee, I would like to mention them here in order to provide a comprehensive view of our budget.

The Bureau of Indian Affairs (BIA) is responsible for managing and protecting natural resources on 52 million acres of trust lands and for assisting tribes to serve nearly 800,000 American Indians and Alaska Natives. It provides community services, operates schools, maintains law enforcement systems, makes welfare payments, assists in farming, ranching, forestry and mining and contracts with over 300 tribes which want to perform a number of these services themselves.

The Secretary of the Interior has special responsibilities to American Indians and Alaska Natives. I reaffirm President Reagan's and my commitments to the government-to-government relationship of Indian Tribes with the United States and to the Tribes' economic development. It remains our goal to turn the ideals of self-determination for Indian Tribes into reality.

The 1986 request of $1.4 billion for the Bureau of Indian Affairs includes $932 million in current appropriations and $467 million in receipt-funded appropriations. This is a decrease of $61 million below the 1985 estimate.

That portion of the BIA budget providing funds for program operations is budgeted at $856 million, $22 million less than the 1985 estimate. The major change in this account is the deletion of the Johnson-O'Malley (JOM) program which is intended to be a supplementary program for special needs of Indian students in public schools. General Accounting Office and Inspector General reports have questioned whether JOM funds are used effectively to meet the unique needs of Indian students. In addition, other Federal and State programs are available to assist these students.

This deletion will allow for high priority increases for on-reservation programs, such as $5.4 million for Indian schools, including funds to implement academic standards to improve the quality of education, $1.9 million for services to newly recognized tribes, $3.8 million for welfare payments, $1.8 million for cadastral surveys in Alaska, and $2.0 million for studies to assist in settling water rights claims by various tribes.

Consistent with the overall deficit situation, the BIA request does not include funds for new construction, although repair and rehabilitation programs are continued. Overall, $70 million is requested for construction, a decrease of $38 million, with emphasis on correcting unsafe conditions, improving waste disposal systems, repairing existing housing, improving dam safety, and providing funds for the Ak Chin and Papago water rights settlements. Road construction will continue at a level of $100 million to be made available from the Highway Trust Fund budget.

## Territorial and International Affairs

The Assistant Secretary for Territorial and International Affairs has certain responsibilities for the Trust Territory of the Pacific Islands and the U.S. territories of American Samoa, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands, although these islands are self-governing and not instrumentalities of the United States. The objectives of the Office of Territorial and International Affairs are to promote the political, economic and social development of these territories and direct each toward greater self-government and self-reliance.

I will continue to strive to meet the President's goal of economic self-sufficiency and governmental self-determination for the people of the U.S. Territories. I recognize that economic diversification and growth are critical to the Territories' self-sufficiency goals. I support the Compact of Free Association, which would recognize two sovereign states, the Republic of the Marshalls and the Federated States of Micronesia, emerging from the Trust Territory of the Pacific Islands. The President has recently resubmitted the Compact to the Congress, and I look forward to working with you to achieve the self-sufficiency freely chosen by these two Trust Territory States.

The total 1986 budget for the Territories, including permanent accounts, is nearly $141 million, which is a reduction of $98 million from the 1985 estimate. Of this reduction, $85 million reflects anticipated Congressional approval in FY 1985 of the Compact of Free Association for the Federated

States of Micronesia and the Republic of the Marshalls. Assuming this approval, funding to support the Compact is included in the 1986 budget for the Department of State.

The request for 1986 continues to provide funding for construction projects ($8 million) in areas where the lack of an adequate infrastructure has been a hindrance to continued economic development. The 1986 request also provides a stable level of Federal support for all territorial government operations ($62 million) and continued support for technical assistance ($2 million). The budget reflects a strategy of encouraging increased private sector participation in territorial development, while enhancing government efficiency and encouraging economic diversification on the islands.

**Secretarial Offices**

The 1986 budget request of $74 million for the Offices of the Secretary ($41 million), Solicitor ($18 million), and Inspector General ($15 million) is $10 million less than the 1985 estimates for these offices. The decrease primarily reflects the Administration's budget policy of a ten percent reduction in headquarters and administrative expenditures. These offices provide Departmental executive direction and management, legal advice, and audits and investigations. The majority of these savings will be accomplished by streamlining operations, instituting more efficient management and procedures, reducing overhead costs, and consolidating administrative functions as part of the Department-wide effort.

Apart from the ten percent reduction for headquarters and administrative expenses, $2 million of the $10 million difference between 1985 and 1986 is the amount appropriated in 1985 for the Special Foreign Currency Program. No funds are requested in the budget for this purpose since foreign currencies used in support of the Department are unlikely to be declared excess to the normal needs of the United States in 1986.

**Conclusion**

In conclusion, I believe the 1986 budget for the Department of the Interior allows the continuation of our important programs and activities while at the same time restraining the Federal deficit by holding down spending. Throughout my tenure, I intend to remain open and accessible to all views. I seek your counsel, communication and advice on all matters involving the Department and would be happy to answer your questions at this time.

# DEPARTMENT of the INTERIOR
## news release

OFFICE OF THE SECRETARY

EMBARGOED FOR RELEASE 1:30 P.M. (EST) FEBRUARY 4, 1985

### CLARK ANNOUNCES INTERIOR BUDGET FOR FY 1986

Secretary of the Interior William Clark announced a proposed FY 1986 budget "that reflects austerity measures designed to reduce the Federal deficit while maintaining the integrity of essential programs. We must dramatically reduce the cost of Government if we are to maintain the progress that the Administration has accomplished in the last four years," Clark said.

The $5.6 billion budget, almost 15 percent ($966 million) less than the FY 1985 level, enables most major programs to continue to operate at or near their current levels. It proposes a three year moratorium on acquisition of most new recreation lands and reduces new funding for construction of water projects and other facilities.

"Last year, President Reagan outlined a water policy that put into place the final building blocks in an improved program to meet America's current and impending water needs while recognizing Federal budgetary realities. By carefully following President Reagan's water policy, we have been able to reduce Federal spending while still moving forward to meet our Nation's water needs," Secretary Clark said. "Negotiating cost sharing arrangements for each project has proven to be a rational, successful approach to financing project construction. The States have shown their willingness to provide appropriate levels of funding and Congress has approved a number of cost sharing arrangements over the past year.

"Funding for endangered species, national wildlife refuges and fish hatcheries, and cooperative fisheries and wildlife research units would be maintained. Significant savings are made Department-wide through administrative and management initiatives and no visitor facilities in the national parks, wildlife refuges or elsewhere on Interior lands would be closed," Clark said.

"We will continue to emphasize as a high priority program exploration of the Nation's energy and mineral resources. And, at the same time, we will ensure that the development of those resources is conducted in an environmentally sound manner."

The Interior Department is one of the Federal Government's largest producers of revenue. Total receipts are estimated in FY 1986 to be $10.4 billion, of which $7.3 billion will come from mineral leasing on the Outer Continental Shelf and $1.2 billion from mineral leasing onshore.

(more)

## MAJOR CHANGES IN 1986

### Land Acquisition

The budget proposes a three-year moratorium for the acquisition of new recreation lands. This will save $148 million in 1986 alone. The only appropriations requested are for $13 million for deficiencies, hardships, emergencies and other necessary costs. Significant funds have been applied over the past four years ($517 million) and new expenditures can be deferred without impairing the primary missions of the Department. Overall, the Interior Department now has primary jurisdiction over 500 million acres of Federal lands, including 79 million in the National Park System and 90 million in the National Wildlife Refuge System. Expenditures amounting to $161 million will be made with funds appropriated in FY 1985. This level will be augmented by unobligated balances from prior years and from Duck Stamp sales receipts. Land acquisition will continue through means other than Federal appropriations (e.g. donations and exchanges for parks, wildlife and other recreation lands). Self-financing mechanisms, such as the Duck Stamp program, will continue to generate revenues for lands acquisition in 1986.

### Construction

New funds for construction of Bureau of Reclamation water projects will decrease by $205 million in FY 1986, but spending from current and prior appropriations, as measured by budget outlays, will remain at 1985 levels. The reclamation program will continue to be carried out under the Administration's policy of cost sharing with project beneficiaries. The reduction in new funding will slow the pace of many construction projects, but no project will be stopped and funds are requested to start construction on 3 new projects, the Buffalo Bill Dam Modification (Wyoming), Headgate Rock Hydroelectric Project (Arizona), and Boulder Canyon Project Improvements (Arizona, Nevada).

Construction in other Interior bureaus is reduced $114 million from the 1985 current estimate. Most of these reductions occur in the National Park Service (-$61 million) and the Bureau of Indian Affairs (-$38 million). Funds are provided for essential rehabilitation and repairs, including correction of dam safety problems and problems in parks, refuges, and on Indian lands.

### Bureau of Land Management/Forest Service Interchange

The 1986 budget reflects an Administration initiative to interchange management responsibilities for certain lands between the Department's Bureau of Land Management (BLM) and the Forest Service (FS) of the Department of Agriculture. The change will provide services to the public more efficiently while eliminating overlapping management responsibilities on 30 to 35 million acres of Federal lands in the Western States. As part of this proposal, the Oregon and California (O&C) Grant Lands program will be transferred to the Forest Service starting in 1986. Plans for implementing this exchange of management responsibilities in other parts of the country are being developed, and appropriate legislation will be submitted to the Congress.

## Grants and Shared Receipts for State and Local Governments

The budget includes $1.2 billion for grants and direct payments to States, territories and local governmental units, $334 million below the current 1985 estimate.

- Funding for the Trust Territory of the Pacific Islands is decreased by $85 million on the assumption that the Congress will pass the Compact of Free Association for the Republic of the Marshalls and the Federated States of Micronesia.
- No funding is requested for State recreation grants from the Land and Water Conservation Fund, representing a savings of $72 million.
- Abandoned mine reclamation grants are reduced by $44 million because recent appropriation levels have significantly exceeded receipts to the Abandoned Mine Reclamation Fund.
- Costs of managing and administering the Federal onshore mineral leasing program will be deducted from revenues to be shared with the States for a savings of $54 million.
- As part of the BLM/FS interchange initiative, O&C receipts will be shifted to the Department of Agriculture for payment resulting in a $68 million decrease in Interior's budget.

## Reductions in Costs of Administration and Personnel Compensation

A ten percent, or $44 million, reduction in headquarters and administrative expenditures for most bureaus is proposed. The proposed five percent reduction in Federal pay in January 1986 will generate an additional $71 million in savings.

## Grazing Fees

The 1986 budget projects an increase in grazing fees that are charged to livestock owners who use public lands. For revenue projection purposes only, OMB assumed an $8 million increase in grazing fee receipts for 1986. The Department expects that revisions to grazing fees will be established by Congress after recommendation by the Secretaries of Agriculture and Interior. Both Departments are now completing a review of grazing fee formulas and should report to Congress in May. In a statement released last week, Secretary Clark noted that the Administration's philosophy is to encourage grazing on multiple use public lands. "We will not give anyone a free ride, of course, but neither will we be party to any fee, program, or policy that unfairly affects the livestock industry or drives our good partners off the historic ranges of America."

Recreation User Fees

The Administration is proposing an initiative to increase recreation user fees with the goal of recovering 25 percent of the Federal costs of providing recreation opportunities to the public. Legislation and appropriation language are being proposed that would repeal existing prohibitions on establishing or increasing recreation fees. These proposals would also allow for the resulting revenues to be retained by the collecting bureau for appropriation in future fiscal years to help defray the costs of operating and maintaining recreational facilities.

x x x

NOTE: More detailed information can be found in the accompanying documents or by calling appropriate Bureau or Department contacts in the attachment.

PRESS CONTACTS FOR FURTHER INFORMATION REGARDING INTERIOR'S FY 1986 BUDGET

(Area codes need not be used from Washington, D.C., unless indicated below)

| AGENCY | NAMES OF CONTACTS | OFFICE PHONE | HOME PHONE |
|---|---|---|---|
| Office of Budget, Department of the Interior | Anthony Itteilag | 343-5308 | 589-7532 |
| | Kristine Marcy | 343-5415 | 333-3138 |
| | Austin Burke | 343-4965 | 437-5022 |
| | Waite Waller | 343-4211 | 654-8082 |
| | Bob Lamb | 343-8077 | 229-6924 |
| Minerals Management Service | Ted Saunders | 860-7526 | 938-5484 |
| | Tom DeRocco | 343-3983 | 933-4925 |
| National Park Service | Duncan Morrow | 343-7394 | 321-7128 |
| | C. Bruce Sheaffer | 343-4566 | 321-9266 |
| Bureau of Reclamation | Jess Pepple | 343-4691 | 860-2530 |
| | Paul Hauffe | 343-8411 | 281-3238 |
| Geological Survey | Donovan Kelly | 860-7444 | (703) 338-4044 |
| | David Seyler | 860-7217 | (703) 435-0878 |
| Fish and Wildlife Service | David Klinger | 343-5634 | 486-0269 |
| | Jim Leupold | 343-2444 | 525-1438 |
| Office of Surface Mining | J. P. Crumrine | 343-4926 | 333-9145 |
| | Larry Finfer | 343-4928 | 544-1343 |
| Bureau of Indian Affairs | Tom Stangl | 343-3627 | 437-6148 |
| | Carl Shaw | 343-4576 | 546-6107 |
| Bureau of Land Management | Roger Hildebeidel | 343-3516 | 354-2683 |
| | Elizabeth Morris | 343-9435 | 483-4260 |
| Bureau of Mines | Bob Swenarton | 634-1001 | 946-3491 |
| | Jim Donahue | 634-1325 | 946-3303 |
| Office of Territorial Affairs | Larry Morgan | 343-4707 | 649-6267 |
| | David Heggestad | 343-6971 | 978-6949 |

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

# FISCAL YEAR 1986 BUDGET SUMMARY

**HOLD FOR RELEASE**

**NOT FOR RELEASE OR REFERENCE TO CONTENTS**

**UNTIL RELEASE OF THE**

**FY 1986 PRESIDENT'S BUDGET**

**1:30 P.M. EST., MONDAY, FEBRUARY 4, 1985**

**HOLD FOR RELEASE**

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Table A Comparison of 1986 Estimates with 1985 Estimates

Table B Current Estimates of Receipts FY 1984, 1985, and 1986

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## DEPARTMENT OF THE INTERIOR

## BUDGET AUTHORITY, OUTLAYS AND RECEIPTS FOR 1984, 1985 AND 1986

(In millions of dollars)

| | FY 1984 Actual | FY 1985[a/] Estimate | FY 1986 Estimate | Change FY 1985 - 1986 |
|---|---|---|---|---|
| BUDGET AUTHORITY | | | | |
| Funds subject to annual appropriation | $ 5,198 | $ 5,272 | $ 4,381 | $ -891 |
| Permanents, trusts and others | 1,432 | 1,330 | 1,255 | -75 |
| Total | 6,630 | 6,602 | 5,635 | -966 |
| OUTLAYS | | | | |
| Funds subject to annual appropriation | 5,212 | 5,424 | 4,850 | -574 |
| Permanents, trusts and others | 1,449 | 1,401 | 1,308 | -93 |
| Total | 6,661 | 6,825 | 6,158 | -667 |
| RECEIPTS | | | | |
| Outer Continental Shelf | 6,694 | 5,302 | 7,317 | +2,015 |
| On-shore Mineral Leasing | 1,197 | 1,214 | 1,247 | +33 |
| Other Receipts | 815 | 895 | 1,796 | +901 |
| Total | $ 8,706 | $ 7,411 | $ 10,360 | $+2,949 |

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a/ Includes appropriations enacted to date, and proposed 1985 supplementals and rescissions.

## BUREAU OVERVIEWS

### Total Budget Authority and Outlays

(In millions of dollars)

| | Budget Authority | | | |
|---|---|---|---|---|
| Bureau | FY 1984 Actual | FY 1985 Estimate | FY 1986 Estimate | Difference FY 1986/ FY 1985 |
| Bureau of Land Management | $ 669 | $ 657 | $ 501 | $ -156 |
| Minerals Management Service | 901 | 672 | 633 | -39 |
| Office of Surface Mining | 342 | 373 | 330 | -43 |
| Bureau of Reclamation | 971 | 1,056 | 840 | -217 |
| Geological Survey | 391 | 409 | 407 | -2 |
| Bureau of Mines | 137 | 135 | 105 | -30 |
| Fish and Wildlife Service | 527 | 588 | 516 | -72 |
| National Park Service | 950 | 927 | 688 | -239 |
| Bureau of Indian Affairs | 1,400 | 1,460 | 1,400 | -61 |
| Territorial and International Affairs | 261 | 239 | 141 | -98 |
| Office of the Secretary | 45 | 47 | 41 | -7 |
| Office of the Solicitor | 20 | 20 | 18 | -2 |
| Office of the Inspector General | 17 | 17 | 15 | -2 |
| Total, Department of the Interior | $ 6,630 | $ 6,602 | $ 5,635 | $ -966 |

| | Budget Outlays | | | |
|---|---|---|---|---|
| Bureau | FY 1984 Actual | FY 1985 Estimate | FY 1986 Estimate | Difference FY 1986/ FY 1985 |
| Bureau of Land Management | $ 671 | $ 652 | $ 508 | $ -144 |
| Minerals Management Service | 893 | 694 | 638 | -56 |
| Office of Surface Mining | 206 | 284 | 320 | +36 |
| Bureau of Reclamation | 873 | 1,022 | 1,013 | -9 |
| Geological Survey | 452 | 419 | 408 | -11 |
| Bureau of Mines | 156 | 140 | 112 | -28 |
| Fish and Wildlife Service | 498 | 585 | 569 | -16 |
| National Park Service | 1,111 | 1,116 | 887 | -228 |
| Bureau of Indian Affairs | 1,487 | 1,535 | 1,471 | -64 |
| Territorial and International Affairs | 240 | 270 | 159 | -112 |
| Office of the Secretary | 32 | 69 | 40 | -29 |
| Office of the Solicitor | 19 | 20 | 18 | -2 |
| Office of the Inspector General | 22 | 20 | 15 | -5 |
| Total, Department of the Interior | $ 6,661 | $ 6,825 | $ 6,158 | $ -667 |

The table on the preceding page depicts budget authority and outlays for the bureaus and major offices of the Department. A graph presented at the end of this section portrays the relative share of the total budget authority by major functional area. The following sections summarize the 1986 budget request for each bureau and major office.

## BUREAU OF LAND MANAGEMENT

The Bureau of Land Management (BLM) is responsible for the conservation, management and development of 310 million acres of public lands, including 138 million acres in Alaska. BLM also has responsibility for mineral leasing and supervision of minerals operations on approximately 370 million additional acres of Federal mineral estate underlying other ownerships.

The 1986 budget estimate is $501 million, a decrease of $156 million from the 1985 estimate. This reduction primarily reflects the transfer of the Oregon and California grant lands program to the Forest Service (FS) (-$127 million) as discussed below.

The budget requests $364.5 million for Management of Lands and Resources (MLR), the Bureau's principal operating appropriation, which includes funds for energy and minerals management, lands and realty management, renewable resources management, planning and data management, cadastral survey, firefighting and rehabilitation, technical services and general administration.

The 1986 estimate reflects the Bureau's continuing efforts to encourage private investment and voluntarism and to work with State and local governments and private users to share in the funding and administration of various activities of predominantly local interest. A major Administration initiative reflected in the 1986 budget is an interchange of intermingled lands and related management functions between BLM and the Forest Service to reduce administrative costs while improving service to the public. Transfer of jurisdictional responsibility for the Oregon and California Lands (O&C lands) and other intermingled public lands in western Oregon from BLM to the FS is an integral part of this proposal.

The $82.8 million requested for energy and minerals management reflects an increase of $2.6 million over the 1985 estimate. The increase is for review and classification of known geological structures, additional post-lease work including more intensive inspection and enforcement efforts for both fluid and solid minerals programs, and cooperative inspection agreements with States and Indian tribes. The budget also requests increases for eradication of illegally grown marijuana from the public lands and for improvements in BLM's ability to detect and suppress wildfires in their early stages.

Decreases are proposed in funding for land and realty operations, wild horse and burro removals, forest management, wildlife habitat management, soil, water and air management (except hazardous materials), and cadastral survey programs.

The budget includes $105 million for the Payment in Lieu of Taxes (PILT) program for payments to local units of government containing Federal lands. This is an increase of $2.1 million over 1985 and will provide full funding under current law. The 1986 budget estimate includes $10 million for range improvement work, the same funding level as 1985; $5.9 million that is available from various cost recovery charges, such as fees for rights-of-way applications; and $1.2 million for acquisition of access easements. The budget also includes $13.7 million in miscellaneous permanent appropriations, most of which are paid to States or counties, and $0.7 million in trust funds. No new funding is requested for land acquisition or construction projects.

In 1986, BLM estimates that collections from timber sales, the sale of land, grazing fees, and miscellaneous sources will be $90 million, a decrease of $114 million from 1985 which primarily reflects the transfer of timber receipts to the Forest Service as a result of the proposed jurisdictional realignments. Receipts from the use of recreation facilities and from grazing fees are projected to increase as a result of fee increases.

## MINERALS MANAGEMENT SERVICE

The Minerals Management Service (MMS) has responsibility for leasing and supervising the development of mineral resources on the Outer Continental Shelf (OCS) and for collecting and accounting for royalties and other mineral revenues due from Federal and Indian leases. As one of the largest collectors of revenue for the Federal government, MMS will collect and account for $6.9 billion in Federal receipts in 1986, including $5.8 million from OCS bonuses, rentals and royalties and $1.1 billion from onshore mineral leasing. In addition, 1986 receipt estimates include $2.5 million in releases from escrow and related interest.

The 1986 budget estimate is $633 million. This includes a permanent appropriation of $479 million for payments to States from onshore mineral leasing receipts and $154 million for MMS program operations.

Funding requested for program operations is reduced by $6.6 million compared to the 1985 estimate. Within this overall decrease, a reduction of $4.8 million is related to the acquisition of pre-lease geologic and geophysical data for the OCS leasing program; in 1986 and thereafter, data will continue to be acquired as a condition of permit but the Federal government will pay only the cost of reproduction. The 1986 budget proposes to phase out the Royalty-in-Kind program and reflects a decreased amount for royalty management computer systems while the Department completes an ongoing reappraisal of these systems. These decreases are partially offset by an increase for revenue collection activities. Within the 1986 request, funds will be redirected to provide for additional helicopter services for the Gulf of Mexico inspection program and additional funding for cooperative and delegated audits by States and Indian tribes.

The 1986 estimate for the Payment to States account reflects a proposal that recipients of mineral leasing revenues share in the costs of realizing those revenues. Currently, States generally receive 50 percent of these revenues without deduction of any of the Federal costs of onshore mineral leasing programs. The 1986 budget includes a proposal to deduct Federal program costs from gross receipts before calculating the State share of these revenues. This cost sharing proposal would reduce the Federal deficit by approximately $54 million in 1986 and by $290 million through 1990.

## OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

The Office of Surface Mining Reclamation and Enforcement (OSM) administers programs for the regulation of coal mining operations to protect the environment and for reclaiming lands damaged by past mining activity. OSM reviews, monitors, and assists State regulatory and reclamation programs to accomplish these objectives. OSM also carries out regulatory and reclamation activities in States which do not have approved programs and on Federal and Tribal lands.

The 1986 budget estimate is $330 million, a decrease of $43 million from the 1985 estimate. In 1985, a supplemental appropriation request of $4.8 million includes $2.6 million for Federal regulatory operations in Tennessee, which relinquished its regulatory responsibility on October 1, 1984, and $2.2 million to augment systems for the assessment and collection of civil penalties and the use of alternative enforcement measures consistent with an out-of-court settlement of two Federal court orders involving the Surface Mining Act. Also proposed is a rescission of $2.9 million for the 1985 State reclamation grant that was intended for Tennessee.

In 1986, OSM will continue to support and provide incentives for States to maintain and improve their regulatory and reclamation programs. These incentives include, within the Regulation and Technology (R&T) account, $38.1 million for State regulatory program grants, an increase of $1.4 million. The remainder of this account, $41.8 million, for a total R&T request of $79.9 million, provides for Federal program operations, technical services, research and general administration.

Within the Abandoned Mine Land (AML) account, OSM is requesting $211.2 million, a decrease of $43.6 million, for non-matching grants to reclaim abandoned mine lands. This decrease is proposed to better align financing and assure support for the States in the future, since recent appropriation levels have significantly exceeded receipts into the AML Fund. The remainder of this account is funded at $39.1 million, for a total AML request of $250.3 million. Included in this amount is a $3.0 million increase ($21.4 million total) for Federal reclamation work on tribal lands and States without approved reclamation programs.

Other changes include a decrease of $6.4 million for the Rural Abandoned Mine Program (RAMP) administered by the Soil Conservation Service of the Department of Agriculture. The $3.4 million requested for RAMP will be sufficient to continue administering projects initiated in prior years. Finally, $3.1 million is requested for the Small Operator Assistance Program.

## BUREAU OF RECLAMATION

The Bureau of Reclamation plans, develops, and operates water resource projects in 17 Western States. The purpose of these programs is to provide irrigation water service, municipal and industrial water supplies, hydroelectric power generation, outdoor recreation and flood control which help stabilize and stimulate local and regional economies. Projects also contribute to environmental protection efforts through their water quality improvement and fish and wildlife enhancement features.

The 1986 budget request of $840 million represents a decrease of $216 million from the $1,056 million 1985 estimate. The major decrease occurs in the Construction Program for which $532 million is requested, $205 million below the 1985 estimate.

The budget request for the Construction Program provides for continuation of 57 projects already underway in 1985 and for three construction initiatives: the enlargement of Buffalo Bill Dam and Powerplant in Wyoming; construction of power generating facilities at Headgate Rock Dam for the Colorado River Indian Reservation in Arizona; and the construction and uprating of facilities at the Hoover Dam in southern Nevada. Preconstruction activities will be underway on two projects, the Narrows Unit and the Uintah Unit, and work will begin on one rehabilitation and betterment project, the Crooked River Irrigation District, and up to three safety of dams projects.

A portion of the reduction in funding can be accommodated because construction prerequisites on some projects, including the Central Utah and Central Valley projects, have not progressed as expected. On other projects, including Columbia Basin, Dolores and some rehabilitation and betterment projects, work is nearing completion and program requirements have diminished accordingly. However, 23 ongoing projects have been identified that will experience construction delays of at least one year.

Based on Presidential policy on water project financing and cost-sharing, project beneficiaries will bear a part of the cost of financing new project development with their share worked out on a case-by-case basis. Safety problems at Reclamation dams will be corrected as expeditiously as possible in accordance with the Reclamation Safety of Dams Act which requires that 15 percent of the cost for certain project purposes must be reimbursed.

The request for the Loan Program is $41 million, a decrease of $26 million compared to 1985. This will provide for the continuation of ten projects and permit work to begin on six projects.

The 1986 estimate for the General Investigations program is $32 million, a decrease of $4 million. This program provides for investigations and engineering and scientific studies of potential projects for the conservation and utilization of water and related land resources. The reduction will delay some engineering investigations and studies, including cloud seeding research projects. Within the $32 million, $2.5 million is included for new advance planning studies and new plan formulation investigations that are important in assisting Western States to meet their water and energy needs.

The budget request for operation and maintenance of Reclamation-constructed facilities is $133 million, a $15 million decrease from the 1985 estimate, of which $13.7 million relates to a change in financing for operation and maintenance of the Boulder Canyon Project. Power revenues and payments from local organizations will finance $31 million in operation and maintenance at Boulder Canyon in 1986 through a permanent appropriation in the Colorado River Dam Fund.

## GEOLOGICAL SURVEY

The major missions of the Geological Survey (GS) are to undertake research, fact finding, and mapping aimed at enlarging the Nation's knowledge of the extent, distribution, and character of its natural resources, and about the geologic processes, structure, and hazards that affect the development and use of the land and the physical environment.

The 1986 budget estimate for GS is $407 million, a decrease of $2 million from the 1985 estimate of $409 million.

The 1986 estimate includes $93.3 million ($83.8 million of appropriations and $9.5 million of estimated receipts from map sales) for the national mapping program. Within this total, increases are requested for digital cartography to meet the new target date of mid-1987 for the 1:100,000 scale digital data base required by the Bureau of Census for the 1990 decennial census. Funds also are requested to further the transition from the existing analog cartographic production system to an advanced digital cartographic system which will take advantage of emerging computer technologies. A decrease is proposed for the land-use and land-cover mapping program, and the side-looking airborne radar program is proposed for elimination because the technology has been demonstrated and applications data can be acquired from the private sector as needed.

The Survey's budget also includes $166.0 million for geologic research and investigations. As part of this amount, increases are proposed for deep continental studies in order to provide a better understanding of deep crustal environments and the processes that produce initial ore deposits as well as earthquakes, volcanic eruptions, geothermal fields and hydrocarbon accumulations. Another initiative addresses the need to develop an information base for the Exclusive Economic Zone (EEZ), which contains nearly 3.4 million square nautical miles of largely unexplored frontier. The expanded effort will accelerate the development of an inventory of the resources of this vast area.

Additional funds are also requested to support mineral resource studies in national forests including wilderness and roadless areas. Funds requested for the world energy resource assessment program will enable completion of a world-wide natural gas assessment and evaluation of the energy resource potential of Latin America and Asia. Decreases are proposed for geologic hazard surveys and energy geologic surveys.

The 1986 estimate includes $129.5 million for investigations to appraise the Nation's water resources and to assure that the water data necessary to develop and manage them effectively are available. This funding level will enhance the collection and monitoring of water-quality and water-quantity data via the national water network collection systems. Additional funding is provided for rehabilitation of network stations and more frequent sampling and data analysis. GS will also assist in quantification analyses of Indian water rights at this funding level. Increased funding is requested to accelerate essential research on the impact of toxic/hazardous substances on surface waters and sediments.

An increase in funds of $0.4 million over 1985 is requested for the data collection and analysis activity of the Federal/State Cooperative program (where funding is matched by State and local cooperators) to augment technical assistance on ground-water contamination and help guide decisions on ground-water protection. Total funding for this program in 1986 is $50.7 million. A decrease of $1 million is proposed for the State water resources research institute program. The Federal coal hydrology program is proposed for elimination. However, there is $4.2 million in the Federal/State Cooperative program for coal hydrology studies.

## BUREAU OF MINES

The Bureau of Mines helps ensure that the Nation has adequate and dependable mineral supplies for economic, security and other needs. Research is conducted to provide the technology for the extraction, processing, use, and recycling of the Nation's mineral resources at acceptable social, environmental, and economic costs. The Bureau also collects, analyzes, and publishes statistical and economic information on all phases of mineral resource development and analyzes the effects of public policy alternatives on mineral supply and demand.

The Bureau of Mines budget request is $105 million for 1986, a decrease of $30 million from the current 1985 estimate. This decrease results from bringing lower priority efforts to conclusion while focusing efforts on a select number of high priority research topics. The request includes $58.8 million for research in all phases of mining and mineral extraction and recycling; $27.0 million for the collection and analysis of data on minerals; and $18.5 million for general administration.

Funding is not being requested for the 31 Mineral Institutes, resulting in a savings of $7.8 million. The Institutes, along with five Generic Minerals Technology Centers, will have sufficient funds from the 1984 and 1985 appropriations to support their programs through 1986. In the future, it is proposed that the Institutes rely on funds from the States and industry and through competing successfully for Federal contracts and grants.

## FISH AND WILDLIFE SERVICE

The mission of the Fish and Wildlife Service is to conserve, protect, and enhance certain fish and wildlife and their habitats. The Service manages the national wildlife refuge system of 424 units, 150 waterfowl production areas, and 58 management areas on nearly 90 million acres. In addition, the Service manages 73 fish hatcheries throughout the country.

The 1986 budget for the Service totals $516 million, a decrease of $72 million below the 1985 estimate. The request for Resource Management, the Service's principal operating account, is $298.7 million. This is $2.5 million below 1985, primarily as a result of anticipated savings from management efficiencies and programmatic decreases related to the completion or phasing down of ongoing activities during 1985. For example, the operations phase of a cooperative program to determine the effects of liming on acidified surface waters will be completed in 1985, for a savings of $2 million, although research on the effects of acid precipitation will continue.

The funding level for Resource Management includes $5.6 million, an increase of $1.2 million above the 1985 level, to initiate or expand activities at eight mitigation facilities under the Lower Snake River Compensation Plan. In addition, the request includes $1.1 million to address the issue of lead/non-toxic shot.

Support for the operation and maintenance of national wildlife refuges will total $101.6 million and will continue funding for Accelerated Refuge Maintenance Management (ARMM) at the 1985 level of $17.2 million. ARMM was initiated in 1984 to address serious maintenance needs of refuges. Funding for fish hatchery operation and maintenance will total $23.9 million; the budget does not anticipate the closure or transfer of any hatcheries.

The 1986 construction request for the Service totals $5.6 million compared to $24.3 million appropriated in 1985. About $2 million of the request is for dam safety. The remaining funds will be used for projects on refuges, at hatcheries and research laboratories, and for the continuation of advance construction planning.

No funds are requested for anadromous fish grants to States. The 1985 grant level was $4 million. The scope of the Service's major program of fish restoration grants (Dingell-Johnson grants) was changed by recent legislative amendments. The amended Dingell-Johnson program makes continued funding for separate anadromous fish grants unnecessary.

During the past five years, considerable resources have been made available to the Fish and Wildlife Service for land acquisition. For example, between 1981 and 1984, $73.3 million has been obligated from the Migratory Bird Conservation account to acquire more than 170,000 acres of important migratory bird habitat. During the same period, $70.7 million from the Land and Water Conservation Fund (LWCF) has been used to acquire more than 72,000 acres of other valuable refuge lands. Moreover, in 1985, $37.6 million in new Migratory Bird Conservation funds and $63.2 million from the LWCF are available to continue these acquisitions. Because of these accomplishments and because of the large Federal deficit, the 1986 budget proposes a three-year moratorium on new acquisitions. However, $16.4 million in revenue from the sale of duck stamps will also be available in 1986 to acquire an estimated 18,500 additional acres.

The 1986 budget proposes to continue appropriations for payments to counties in lieu of taxes under the National Wildlife Refuge Fund at the 1985 level of $5.6 million. Appropriated funds will be supplemented with prior year receipts from the sale of timber, grazing privileges, oil, gas, and minerals, and from fees.

As indicated above, recent amendments to the Federal Aid in Sport Fish Restoration Act (the Dingell-Johnson Act) will expand grants to States for these programs. The budget projects an increase of $6 million above the 1985 level of $38 million for these grants. The increase will be derived primarily from additional excise taxes allowed under the legislative amendments. However, in an effort to limit Federal spending during a time of high deficits, the budget does not make available new revenue from import duties on pleasure boats and motorboat fuel taxes. Finally, the budget proposes to make revenue available to the States under this program subject to the annual appropriation process.

## NATIONAL PARK SERVICE

The National Park System contains 334 areas which cover 79.4 million acres of land in 49 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and the Northern Marianas. The National Park Service has the dual responsibility of protecting the natural and cultural resources of these areas, and of providing for their use and enjoyment by the public. The Service also conducts a variety of programs which promote and assist outdoor recreation planning, preservation of cultural and natural resources, and environmental compliance and review among other Federal agencies, State and local governments, and private organizations.

The budget request in 1986 is $688 million, a decrease of $239 million from the 1985 estimate. Following the successful completion of a four-year initiative which resulted in the investment of more than $1.0 billion in the restoration and improvement of park facilities, funding for maintenance and preservation projects is being reduced in 1986. The 1986 budget also includes decreases of $1.8 million for National Recreation and Preservation Programs, $61.6 million for construction, and $135.9 million for Land Acquisition and State Assistance. No funds are requested for matching grants to States from the Historic Preservation Fund, a decrease of $25.5 million from 1985. An increase of $2.6 million is proposed for the Visitor Facilities Fund to utilize estimated revenues available for the repair of government-owned concession facilities.

The 1986 request for the Operation of the National Park System appropriation is $585.7 million, a net decrease of $18.6 million from 1985. The largest decrease, $24.5 million, is in park maintenance and preservation projects because of the successful completion of maintenance and restoration activities under PRIP as noted above. The remaining decreases include: $15.1 million in reduced pay costs resulting from the proposed five percent decrease in Federal salaries; $6.1 million resulting from the consolidation and improvement of headquarters and administrative operations and improved position management; and $1.5 million in reduced support to a number of private artistic and cultural facilities in the National Capital area.

These decreases are offset in part by increases of $14.3 million resulting from the January 1985 Federal pay increase and $6.3 million for fixed administrative expenses.

The 1986 request for National Recreation and Preservation is $9.3 million, $1.8 million less than the 1985 request. In order to reduce Federal spending, the Administration proposes that direct support of public recreation programs be reduced. Accordingly, reductions are proposed in technical assistance to State and local governments for their recreation programs, and no funding is provided for technical assistance to States for river conservation programs.

Funding reductions in Federal rivers and trails studies are possible since some studies will be completed and new studies are not being proposed.

The proposed budget for construction is $49.5 million, a decrease of $61.6 million. During 1982-1985, $431 million was invested in construction to meet high priority construction needs, primarily for health and safety projects to correct deficiencies identified by both the General Accounting Office (GAO) and the Department. Because most of the highest priority health and safety projects have been completed, as noted by GAO in a recent report, construction for 1986 is budgeted at a lower level than during the PRIP years. Funding is included for 15 projects in 11 parks, primarily to correct health and safety deficiencies and to provide adequate housing for employees at two remote parks in Alaska.

The 1986 request to support the non-performing arts operations of the John F. Kennedy Center for the Performing Arts is $4.5 million, the same level provided for in 1985.

During the 1981-1984 period, the Park Service obligated over $365 million to acquire nearly 64,000 acres of park land, and more than 10,000 acres were acquired by donation or transfer. An additional $66.8 million is available for acquisition in 1985. To help reduce the Federal deficit, the budget proposes a three-year moratorium on the acquisition of new Federal park lands and eliminates State recreation grants. Accordingly, the 1986 budget request for Land Acquisition is $11.3 million, a decrease of $135.9 million from the 1985 appropriation. Of this total, $5.0 million will be available for emergency and hardship acquisitions and to cover expected deficiency court awards. Remaining funds will be used to administer ongoing acquisition actions and to administer the close-out of State matching grants awarded in prior fiscal years.

No budget authority is requested for grants from the Historic Preservation Fund. Direct Federal support for historic preservation will be limited to those properties which are part of the National Park System. The Administration has taken steps to encourage private sector involvement in historic preservation through the enhancement of economic and tax incentives which have been highly successful. In 1984 alone, tax credits are estimated to total $255 million. During the past three years, the private sector has invested about $5.4 billion in over 7,500 preservation projects that qualify for tax credits.

The 1986 request for the Visitor Facilities Fund is $8.5 million. This account utilizes revenues collected from concessioner franchise and building use fees in prior years to restore and repair concessioner-operated facilities owned by the National Park Service. The appropriation requested is based on the estimated available revenues for 1986.

## BUREAU OF INDIAN AFFAIRS

The Bureau of Indian Affairs (BIA) is responsible for managing and protecting natural resources on 52 million acres of trust lands and for assisting tribes to serve nearly 800,000 American Indians and Alaska Natives. It provides community services, operates schools, maintains law enforcement systems, makes welfare payments, assists in farming, ranching, forestry and mining and contracts with over 300 tribes which want to perform these services themselves.

The Bureau's budget is the largest in the Department, comprising 26 percent of the total in 1986. The request of $1.4 billion for BIA includes $932 million in direct Federal appropriations and $467 million in receipt-funded appropriations. The total is $61 million below the 1985 estimate.

That portion of the BIA budget providing funds for program operations is budgeted at $856 million, $22 million less than the 1985 estimate. The major change in this account is the deletion of the Johnson-O'Malley (JOM) program which is intended to be a supplementary program for special needs of Indian students in public schools. General Accounting Office and Inspector General reports have questioned whether JOM funds are used effectively to meet the unique needs of Indian students. In addition, other Federal and State programs are available to assist these students.

This deletion will allow for high priority increases for on-reservation programs, such as $5.4 million for Indian schools, including funds to implement academic standards to improve the quality of education, $1.9 million for services to newly recognized tribes, $3.8 million for welfare payments, $1.8 million for cadastral surveys in Alaska, and $2.0 million for studies to assist in settling water rights claims by various tribes.

Consistent with overall budget policy, the BIA request does not include funds for new construction, although repair and rehabilitation programs are continued. Overall, $70 million is requested for construction, a decrease of $38 million, with emphasis on correcting unsafe conditions, improving waste disposal systems, repairing existing housing, improving dam safety, and meeting the Federal government's commitments for the Ak Chin and Papago water rights settlements. Road construction will continue at a level of $100 million to be made available from the Highway Trust Fund budget.

Permanent appropriations and trust funds are estimated to be $467 million in 1986, a decrease of approximately $5 million from 1985. Receipts from irrigation and power charges are anticipated to be at the same level as 1985. However, receipts from leasing and royalties on Indian trust land, which are deposited into tribal trust funds, are expected to decrease slightly. Most of this reduction is attributed to lower estimated oil and gas prices.

## OFFICE OF TERRITORIAL AND INTERNATIONAL AFFAIRS

The Assistant Secretary for Territorial and International Affairs has certain responsibilities for the Trust Territory of the Pacific Islands and the U.S. territories of American Samoa, Guam, the Northern Mariana Islands, and the

U.S. Virgin Islands, although these islands are self-governing and not instrumentalities of the United States. The objectives of the Office of Territorial and International Affairs are to promote the political, economic and social development of these territories and direct each toward greater self-government and self-reliance.

The 1986 request totals nearly $141 million, which is a reduction of $98 million from the 1985 estimate. Of this reduction, $85 million reflects anticipated Congressional approval in fiscal year 1985 of the Compact of Free Association for the Federated States of Micronesia and the Republic of the Marshalls. Assuming this approval, funding to support the Compact is included in the 1986 budget for the Department of State.

The request for 1986 continues to provide funding for construction projects ($8 million) in areas where the lack of an adequate infrastructure has been a hindrance to continued economic development. The 1986 request also provides a stable level of Federal support for territorial government operations ($62 million) and continued emphasis on technical assistance ($2 million). The budget reflects a strategy of encouraging increased private sector participation in territorial development, while enhancing government efficiency and encouraging economic diversification on the islands.

## SECRETARIAL OFFICES

The budget request of $74.2 million for the Offices of the Secretary ($40.6 million), Solicitor ($18.4 million), and Inspector General ($15.2 million) is $10.2 million less than the 1985 estimate for these offices. The decrease primarily reflects the Administration's budget policy of a ten percent reduction in headquarters and administrative expenditures. These offices provide Departmental executive direction and management, legal advice, and audits and investigations. The majority of these savings will be accomplished by streamlining operations, instituting more efficient management and procedures, reducing overhead costs, and consolidating administrative functions as part of the Department-wide effort.

Apart from the ten percent reduction for headquarters and administrative expenses, $2 million of the $10 million difference between 1985 and 1986 is the amount appropriated in 1985 for the Special Foreign Currency Program. No funds are requested for this purpose in 1986.

TABLE 3

### DEPARTMENT OF THE INTERIOR
FY 1986 President's Budget
Comparison of 1986 Estimate with 1985 Estimate
Full-Time Equivalent Employment and Budget Authority

(Dollar amounts in thousands) a/

| Bureau/Appropriation | 1985 Estimate FTE/T | 1985 Estimate Amount | 1986 Estimate FTE/T | 1986 Estimate Amount | Change from 1985 FTE/T | Change from 1985 Amount |
|---|---|---|---|---|---|---|
| **Interior and Related Agencies Appropriations** | | | | | | |
| **BUREAU OF LAND MANAGEMENT** | | | | | | |
| Appropriations: | | | | | | |
| Management of Lands and Resources (MLR).... | 8,691 | 385,972 | 8,348 | 364,524 | (343) | (21,448) |
| Construction and Access.................... | 31 | 1,203 | 31 | 1,203 | 0 | 0 |
| Payments in Lieu of Taxes.................. | 1 | 102,900 | 1 | 105,000 | 0 | 2,100 |
| Land Acquisition........................... | 8 | 2,695 | 7 | 0 | (1) | (2,695) |
| Oregon and California Grant Lands (O&C).... | 998 | 54,289 | 0 | 0 | (998) | (54,289) |
| Range Improvements......................... | 130 | 10,000 | 130 | 10,000 | 0 | 0 |
| Special Acquisition for Lands and Minerals................................. | 0 | 14,700 | 0 | 0 | 0 | (14,700) |
| Services Charges, Deposits and Forfeitures (indefinite)................. | 33 | 4,070 | 45 | 5,920 | 12 | 1,850 |
| Miscellaneous Trust Funds (indefinite)..... | 0 | 100 | 0 | 100 | 0 | 0 |
| Subtotal, appropriations................. | 9,892 | 575,929 | 8,562 | 486,747 | (1,330) | (89,182) |
| Proposed 1985 Supplementals: | | | | | | |
| MLR - (pay costs) - to be derived by transfer from "Construction (Trust Fund)", National Park Service | | [ 2,000] | | [ 0] | | [ (2,000)] |
| O&C - (fire suppression) - to be derived by transfer from "Construction (Trust Fund)", National Park Service | | [ 3,000] | | [ 0] | | [ (3,000)] |
| Land Acquisition - (Navajo/Hopi) - to be derived by transfer from "Construction (Trust Fund)", National Park Service | | [ 2,000] | | [ 0] | | [ (2,000)] |
| Proposed 1985 Rescissions: | | | | | | |
| MLR - Section 2901.......................... | 0 | (5,778) | 0 | 0 | 0 | 5,778 |
| O&C - Section 2901.......................... | 0 | (679) | 0 | 0 | 0 | 679 |
| Working Capital Fund - Section 2901 - (unobligated balance) | | [ (2,951)] | | [ 0] | | [ 2,951] |
| Subtotal, rescissions..................... | 0 | (6,457) | 0 | 0 | 0 | 6,457 |
| Transfers: | | | | | | |
| From: MLR - BLM .............................<br>To: S&E - SOL | (4) | (119) | 0 | 0 | 4 | 119 |
| Permanent Accounts: | | | | | | |
| Special Acquisition for Lands and Minerals (authority to borrow)............ | 0 | 1,300 | 0 | 1,300 | 0 | 0 |
| Miscellaneous Permanent Appropriations..... | 55 | 85,494 | 0 | 12,408 | (55) | (73,086) |
| Miscellaneous Trust Funds (indefinite)..... | 16 | 600 | 16 | 600 | 0 | 0 |
| Subtotal, permanent accounts.............. | 71 | 87,394 | 16 | 14,308 | (55) | (73,086) |

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a/ In the "1985 and 1986 Estimate" columns, a number in parentheses indicates a negative number. In the "Change from 1985" column, a number with no sign indicates an increase (+) while a number in parentheses indicates a decrease (-). Throughout this appendix, bracketed numbers are non-add.

TABLE A (Continued)

(Dollar amounts in thousands)

| Bureau/Appropriation | 1985 Estimate FTE/T | 1985 Estimate Amount | 1986 Estimate FTE/T | 1986 Estimate Amount | Change from 1985 FTE/T | Change from 1985 Amount |
|---|---|---|---|---|---|---|
| Other: | | | | | | |
| Reimbursements and allocations to other accounts | 213 | 0 | 240 | 0 | 27 | 0 |
| TOTAL, BUREAU OF LAND MANAGEMENT | 10,172 | 656,747 | 8,818 | 501,055 | (1,354) | (155,692) |
| MINERALS MANAGEMENT SERVICE | | | | | | |
| Appropriations: | | | | | | |
| Minerals and Royalty Management (MARM) | 2,055 | 163,482 | 2,000 | 154,241 | (55) | (9,241) |
| Proposed 1985 Rescissions: | | | | | | |
| MARM - Sectior 2901 | 0 | (1,764) | 0 | 0 | 0 | 1,764 |
| Transfers: | | | | | | |
| From: MARM - MMS<br>To: SIR - USGS | (15) | (922) | 0 | 0 | 15 | 922 |
| Permanent Accounts: | | | | | | |
| Payments to States from receipts under Mineral Leasing Act | 0 | 510,455 | 0 | 479,083 | 0 | (31,372) |
| Proposed 1985 Supplementals - Permanent Accounts: | | | | | | |
| Payments to States from receipts under Mineral Leasing Act - (interest on late payments) | 0 | 800 | 0 | 0 | 0 | (800) |
| TOTAL, MINERALS MANAGEMENT SERVICE | 2,040 | 672,051 | 2,000 | 633,324 | (40) | (38,727) |
| OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT | | | | | | |
| Appropriations: | | | | | | |
| Regulation and Technology (R&T) | 624 | 75,092 | 660 | 79,921 | 36 | 4,829 |
| Abandoned Mine Reclamation Fund (AML) | 315 | 296,941 | 315 | 250,324 | 0 | (46,617) |
| Subtotal, appropriations | 939 | 372,033 | 975 | 330,245 | 36 | (41,788) |
| Proposed 1985 Supplementals: | | | | | | |
| R&T - (pay costs) - to be derived by transfer from prior-year unobligated balances in "Abandoned Mine Reclamation Fund" | [ | 455] | [ | 0] | [ | (455)] |
| R&T - (Federal Regulatory Programs) | 52 | 4,800 | 0 | 0 | (52) | (4,800) |
| Subtotal, supplementals | 52 | 4,800 | 0 | 0 | (52) | (4,800) |

TABLE A (Continued)

(Dollar amounts in thousands)

| Bureau/Appropriation | 1985 Estimate |  | 1986 Estimate |  | Change from 1985 |  |
|---|---|---|---|---|---|---|
|  | FTE/T | Amount | FTE/T | Amount | FTE/T | Amount |
| Proposed 1985 Rescissions: |  |  |  |  |  |  |
| R&T - Section 2901 | 0 | (546) | 0 | 0 | 0 | 546 |
| AML - Section 2901 | 0 | (333) | 0 | 0 | 0 | 333 |
| AML - State Reclamation Program Grants | 0 | (2,900) | 0 | 0 | 0 | 2,900 |
| Subtotal, rescissions | 0 | (3,779) | 0 | 0 | 0 | 3,779 |
| Transfers: |  |  |  |  |  |  |
| From: AML - OSM<br>To: R&T - OSM |  | [ (455)] |  | [ 0] |  | [ 455] |
| Other: |  |  |  |  |  |  |
| Reimbursements and allocations to other accounts | 105 | 0 | 84 | 0 | (21) | 0 |
| TOTAL, OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT | 1,096 | 373,054 | 1,059 | 330,245 | (37) | (42,809) |
| GEOLOGICAL SURVEY |  |  |  |  |  |  |
| Appropriations |  |  |  |  |  |  |
| Surveys, Investigations & Research (SIR) | 7,729 | 412,251 | 7,634 | 406,570 | (95) | (5,581) |
| Proposed 1985 Rescissions: |  |  |  |  |  |  |
| SIR - Section 2901 | 0 | (4,519) | 0 | 0 | 0 | 4,519 |
| Transfers: |  |  |  |  |  |  |
| From: MARM - MMS | 15 | 922 | 0 | 0 | (15) | (922) |
| From: General Investigations - Bureau of Reclamation ($1,688,000, prior-year unobligated balance also transferred)<br>To: SIR - GS | 10 | [ 1,688] | 0 | [ 0] | (10) | [ (1,688)] |
| Subtotal, transfers | 25 | 922 | 0 | 0 | (25) | (922) |
| Permanent Accounts: |  |  |  |  |  |  |
| Contributed Funds | 5 | 500 | 5 | 500 | 0 | 0 |
| Other: |  |  |  |  |  |  |
| Reimbursements and allocations from other accounts | 2,172 | 0 | 2,172 | 0 | 0 | 0 |
| TOTAL, GEOLOGICAL SURVEY | 9,931 | 409,154 | 9,811 | 407,170 | (120) | (1,984) |
| BUREAU OF MINES |  |  |  |  |  |  |
| Appropriations: |  |  |  |  |  |  |
| Mines and Minerals | 2,144 | 135,959 | 1,989 | 104,313 | (155) | (31,646) |

TABLE A (Continued)

(Dollar amounts in thousands)

| Bureau/Appropriation | 1985 Estimate | | 1986 Estimate | | Change from 1985 | |
|---|---|---|---|---|---|---|
| | FTE/T | Amount | FTE/T | Amount | FTE/T | Amount |
| **Proposed 1985 rescissions:** | | | | | | |
| Mines and Minerals - Section 2901 | 0 | (1,355) | 0 | 0 | 0 | 1,355 |
| **Permanent Accounts:** | | | | | | |
| Contributed Funds | 12 | 500 | 12 | 500 | 0 | 0 |
| **Other:** | | | | | | |
| Reimbursements and allocations to other accounts | 255 | 0 | 255 | 0 | 0 | 0 |
| TOTAL, BUREAU OF MINES | 2,411 | 135,104 | 2,256 | 104,813 | (155) | (30,291) |
| **FISH AND WILDLIFE SERVICE** | | | | | | |
| **Appropriations:** | | | | | | |
| Resource Management | 5,589 | 305,138 | 5,547 | 298,735 | (42) | (6,403) |
| Construction | 138 | 24,298 | 138 | 5,613 | 0 | (18,685) |
| Land Acquisition | 63 | 63,218 | 58 | 1,500 | (5) | (61,718) |
| Migratory Bird Conservation Account - Advance | 0 | 21,266 | 0 | 0 | 0 | (21,266) |
| National Wildlife Refuge Fund - Payments in Lieu of Taxes | 0 | 5,645 | 0 | 5,645 | 0 | 0 |
| Sport Fish Restoration | 0 | 0 | 26 | 44,000 | 26 | 44,000 |
| Subtotal, appropriations | 5,790 | 419,565 | 5,769 | 355,493 | (21) | (64,072) |
| **Proposed 1985 Supplementals:** | | | | | | |
| Construction - (fire suppression) - to be derived by transfer from "Construction (Trust Fund)", National Park Service | | [ 4,000] | | [ 0] | | [ (4,000)] |
| **Proposed 1985 Rescissions:** | | | | | | |
| Resource Management - Section 2901 | 0 | (3,869) | 0 | 0 | 0 | 3,869 |
| Construction - Section 2901 | 0 | (40) | 0 | 0 | 0 | 40 |
| Subtotal, rescissions | 0 | (3,909) | 0 | 0 | 0 | 3,909 |
| **Permanent Accounts:** | | | | | | |
| Resource Management | 0 | 250 | 0 | 250 | 0 | 0 |
| Migratory Bird Conservation Account | 157 | 16,376 | 157 | 16,400 | 0 | 24 |
| National Wildlife Refuge Fund | 26 | 7,040 | 26 | 7,040 | 0 | 0 |
| Miscellaneous Permanent Appropriations | | | | | | |
| Federal Aid in Fish Restoration | 26 | 38,086 | 0 | 0 | (26) | (38,086) |
| Federal Aid in Wildlife Restoration | 74 | 85,872 | 74 | 111,600 | 0 | 25,728 |
| Proceeds from Sales | 0 | 200 | 0 | 200 | 0 | 0 |
| Subtotal, Misc Permanent Appropriations | 100 | 124,158 | 74 | 111,800 | (26) | (12,358) |
| Operation and Maintenance of Quarters | 16 | 20,915 | 16 | 21,084 | 0 | 169 |
| Contributed Funds | 93 | 3,838 | 93 | 4,165 | 0 | 327 |
| Subtotal, permanent accounts | 392 | 172,577 | 366 | 160,739 | (26) | (11,838) |

TABLE A (Continued)

(Dollar amounts in thousands)

| Bureau/Appropriation | 1985 Estimate FTE/T | 1985 Estimate Amount | 1986 Estimate FTE/T | 1986 Estimate Amount | Change from 1985 FTE/T | Change from 1985 Amount |
|---|---|---|---|---|---|---|
| Other: | | | | | | |
| Reimbursements and allocations to other accounts | 435 | 0 | 415 | 0 | (20) | 0 |
| TOTAL, FISH AND WILDLIFE SERVICE | 6,617 | 588,233 | 6,550 | 516,232 | (67) | (72,001) |
| NATIONAL PARK SERVICE | | | | | | |
| Appropriations: | | | | | | |
| Operation of the Nat'l Park System (ONPS) | 14,959 | 612,858 | 14,801 | 585,685 | (158) | (27,173) |
| National Recreation and Preservation | 287 | 11,111 | 232 | 9,259 | (55) | (1,852) |
| Construction | 624 | 111,442 | 613 | 49,456 | (11) | (61,986) |
| JFK Center for the Performing Arts | 78 | 4,529 | 78 | 4,529 | 0 | 0 |
| Land Acquisition | 207 | 147,216 | 207 | 11,275 | 0 | (135,941) |
| Historic Preservation Fund | 0 | 25,480 | 0 | 0 | 0 | (25,480) |
| Visitor Facilities Fund | 0 | 5,880 | 0 | 8,500 | 0 | 2,620 |
| Illinois and Michigan Canal National Heritage Corridor Commission | 0 | 245 | 0 | 0 | 0 | (245) |
| Jefferson National Expansion Memorial Commission | 0 | 73 | 0 | 0 | 0 | (73) |
| National Capital Region Arts and Cultural Affairs | 0 | 0 | 0 | 4,900 | 0 | 4,900 |
| Construction (Trust Fund) | 0 | 0 | 0 | 0 | 0 | 0 |
| Subtotal, appropriations | 16,155 | 918,834 | 15,931 | 673,604 | (224) | (245,230) |
| Proposed 1985 Supplementals: | | | | | | |
| ONPS - (pay costs) - to be derived by transfer from "Construction (Trust Fund)", National Park Service | | [ 10,700] | | [ 0] | | [ (10,700)] |
| Land Acquisition - (fire suppression) - to derived by transfer from "Construction (Trust Fund)", National Park Service | | [ 3,216] | | [ 0] | | [ (3,216)] |
| Proposed 1985 Rescissions: | | | | | | |
| ONPS - Section 2901 | 0 | (8,598) | 0 | 0 | 0 | 8,598 |
| Nat'l Rec & Pres - Section 2901 | 0 | (94) | 0 | 0 | 0 | 94 |
| Construction - Section 2901 | 0 | (397) | 0 | 0 | 0 | 397 |
| Land Acquisition - Section 2901 | 0 | (52) | 0 | 0 | 0 | 52 |
| Subtotal, rescissions | 0 | (9,141) | 0 | 0 | 0 | 9,141 |
| Transfers: | | | | | | |
| From: National Capital Region Arts and Cultural Affairs - NPS<br>To: Construction - BIA | 0 | 0 | 0 | (4,900) | 0 | (4,900) |
| From: Construction (Trust Fund) - NPS<br>To: Various accounts throughout the Department - BLM, FWS, NPS, BIA, & SOL | | [ (38,172)] | | [ 0] | | [ 38,172] |

TABLE A (Continued)

(Dollar amounts in thousands)

| Bureau/Appropriation | 1985 Estimate |  | 1986 Estimate |  | Change from 1985 |  |
|---|---|---|---|---|---|---|
|  | FTE/T | Amount | FTE/T | Amount | FTE/T | Amount |
| **Permanent Accounts:** |  |  |  |  |  |  |
| Land Acquisition - Contract Authority...... | 0 | 30,000 | 0 | 30,000 | 0 | 0 |
| Miscellaneous Permanent Appropriations..... | 14 | 1,020 | 14 | 1,035 | 0 | 15 |
| Miscellaneous Trust Funds.................. | 44 | 16,059 | 48 | 18,148 | 4 | 2,089 |
| Subtotal, permanent accounts............. | 58 | 47,079 | 62 | 49,183 | 4 | 2,104 |
| **Proposed 1985 Rescissions - Permanent Accounts:** |  |  |  |  |  |  |
| Land Acquisition - Contract Authority...... | 0 | (30,000) | 0 | (30,000) | 0 | 0 |
| **Other:** |  |  |  |  |  |  |
| Reimbursements and allocations to other accounts................................. | 356 | 0 | 352 | 0 | (4) | 0 |
| TOTAL, NATIONAL PARK SERVICE................ | 16,569 | 926,772 | 16,345 | 687,887 | (224) | (238,885) |
| **BUREAU OF INDIAN AFFAIRS** |  |  |  |  |  |  |
| **Appropriations:** |  |  |  |  |  |  |
| Operation of Indian Programs (OIP)......... | 13,066 | 877,916 | 12,922 | 855,687 | (144) | (22,229) |
| Construction................................ | 149 | 107,492 | 149 | 70,245 | 0 | (37,247) |
| Road Construction........................... | 40 | 5,880 | 40 | 0 | 0 | (5,880) |
| Payment to Utah Paiute Fund................ | 0 | 2,450 | 0 | 0 | 0 | (2,450) |
| Indian Loan Guaranty & Insurance Fund...... | 0 | 0 | 0 | 1,485 | 0 | 1,485 |
| Miscellaneous Trust Funds.................. | 0 | 4,000 | 0 | 4,000 | 0 | 0 |
| Subtotal, appropriations................. | 13,255 | 997,738 | 13,111 | 931,417 | (144) | (66,321) |
| **Proposed 1985 Supplementals:** |  |  |  |  |  |  |
| OIP - (pay costs) - to be derived by transfer from "Construction" |  | [ 5,000] |  | [ 0] |  | [ (5,000)] |
| Construction - (fire suppression) - to be derived by transfer from "Construction (Trust Fund)", National Park Service |  | [ 12,850] |  | [ 0] |  | [ (12,850)] |
| **Proposed 1985 Rescissions:** |  |  |  |  |  |  |
| OIP - Section 2901......................... | 0 | (5,570) | 0 | 0 | 0 | 5,570 |
| **Transfers:** |  |  |  |  |  |  |
| From: Construction - BIA.................... | 0 | (5,000) | 0 | 0 | 0 | 5,000 |
| To: OIP - BIA............................. | 0 | 5,000 | 0 | 0 | 0 | (5,000) |
| From: National Capital Region Arts and Cultural Affairs - NPS<br>To: Construction - BIA.................... | 0 | 0 | 0 | 4,900 | 0 | 4,900 |
| Subtotal, transfers...................... | 0 | 0 | 0 | 4,900 | 0 | 4,900 |

TABLE A (Continued)

(Dollar amounts in thousands)

| Bureau/Appropriation | 1985 Estimate | | 1986 Estimate | | Change from 1985 | |
|---|---|---|---|---|---|---|
| | FTE/T | Amount | FTE/T | Amount | FTE/T | Amount |
| Permanent accounts: | | | | | | |
| Miscellaneous Permanent Appropriations..... | 522 | 46,000 | 522 | 46,000 | 0 | 0 |
| Cooperative Fund (Papago).................. | 0 | 3,850 | 0 | 1,280 | 0 | (2,570) |
| Miscellaneous Trust Funds.................. | 10 | 418,386 | 0 | 416,136 | (10) | (2,250) |
| Subtotal, permanent accounts............. | 532 | 468,236 | 522 | 463,416 | (10) | (4,820) |
| Other: | | | | | | |
| Reimbursements and allocations to other accounts.................................. | 49 | 0 | 0 | 0 | (49) | 0 |
| TOTAL, BUREAU OF INDIAN AFFAIRS............. | 13,836 | 1,460,404 | 13,633 | 1,399,733 | (203) | (60,671) |
| OFFICE OF TERRITORIAL AND INTERNATIONAL AFFAIRS | | | | | | |
| Appropriations: | | | | | | |
| Administration of Territories............... | 51 | 75,557 | 41 | 61,333 | (10) | (14,224) |
| Trust Territory of the Pacific Islands..... | 15 | 98,795 | 10 | 13,500 | (5) | (85,295) |
| Subtotal, appropriations.................. | 66 | 174,352 | 51 | 74,833 | (15) | (99,519) |
| Proposed 1985 Supplementals: | | | | | | |
| Admin of Territories - Northern Mariana Islands Covenant Adjustment............... | 0 | 1,994 | 0 | 0 | 0 | (1,994) |
| Proposed 1985 Rescissions: | | | | | | |
| Admin of Territories - Section 2901........ | 0 | (107) | 0 | 0 | 0 | 107 |
| Permanent Accounts: | | | | | | |
| Payments to U.S. Territories, Fiscal Asst.. | 0 | 63,000 | 0 | 66,000 | 0 | 3,000 |
| TOTAL, TERRITORIAL & INTERNATIONAL AFFAIRS.. | 66 | 239,239 | 51 | 140,833 | (15) | (98,406) |
| OFFICE OF THE SECRETARY | | | | | | |
| Appropriations: | | | | | | |
| Office of the Secretary (O/SEC)............. | 758 | 44,633 | 688 | 39,939 | (70) | (4,694) |
| Construction Management..................... | 13 | 735 | 10 | 660 | (3) | (75) |
| Salaries and Expenses (Special Foreign Currency).................................. | 0 | 1,960 | 0 | 0 | 0 | (1,960) |
| Subtotal, appropriations.................. | 771 | 47,328 | 698 | 40,599 | (73) | (6,729) |

TABLE A (Continued)

(Dollar amounts in thousands)

| Bureau/Appropriation | 1985 Estimate |  | 1986 Estimate |  | Change from 1985 |  |
|---|---|---|---|---|---|---|
|  | FTE/T | Amount | FTE/T | Amount | FTE/T | Amount |
| Other: |  |  |  |  |  |  |
| Working Capital Fund | 247 | 0 | 262 | 0 | 15 | 0 |
| Reimbursements and allocations to other accounts | 17 | 0 | 16 | 0 | (1) | 0 |
| Subtotal, other | 264 | 0 | 278 | 0 | 14 | 0 |
| TOTAL, OFFICE OF THE SECRETARY | 1,035 | 47,328 | 976 | 40,599 | (59) | (6,729) |
| OFFICE OF THE SOLICITOR |  |  |  |  |  |  |
| Appropriations: |  |  |  |  |  |  |
| Salaries and Expenses (S&E) | 380 | 20,137 | 343 | 18,417 | (37) | (1,720) |
| Proposed 1985 Supplementals: |  |  |  |  |  |  |
| S&E - (pay costs) - to be derived by transfer from "Construction (Trust Fund)", National Park Service |  | [ 406] |  | [ 0] |  | [ (406)] |
| Transfers: |  |  |  |  |  |  |
| From: MLR - BLM<br>To: S&E - SOL | 4 | 119 | 0 | 0 | (4) | (119) |
| Other: |  |  |  |  |  |  |
| Reimbursements and allocations to other accounts | 3 | 0 | 3 | 0 | 0 | 0 |
| TOTAL, OFFICE OF THE SOLICITOR | 387 | 20,256 | 346 | 18,417 | (41) | (1,839) |
| OFFICE OF INSPECTOR GENERAL |  |  |  |  |  |  |
| Appropriations: |  |  |  |  |  |  |
| Office of Inspector General (OIG) | 314 | 16,908 | 280 | 15,175 | (34) | (1,733) |
| TOTAL, OFFICE OF THE INSPECTOR GENERAL | 314 | 16,908 | 280 | 15,175 | (34) | (1,733) |
| TOTAL, INTERIOR AND RELATED AGENCIES | 64,474 | 5,545,250 | 62,125 | 4,795,483 | (2,349) | (749,767) |
| (Appropriations) | 59,490 | 4,254,516 | 57,343 | 3,591,754 | (2,147) | (662,762) |
| (Supplementals) | 52 | 6,794 | 0 | 0 | (52) | (6,794) |
| (Rescissions) | 0 | (36,601) | 0 | 0 | 0 | 36,601 |
| (Transfers) | 10 | 0 | 0 | 0 | (10) | 0 |
| (Permanents) | 1,070 | 1,349,741 | 983 | 1,233,729 | (87) | (116,012) |
| (Supplementals - permanent accounts) | 0 | 800 | 0 | 0 | 0 | (800) |
| (Rescissions - permanent accounts) | 0 | (30,000) | 0 | (30,000) | 0 | 0 |
| (Other) | 3,852 | 0 | 3,799 | 0 | (53) | 0 |

TABLE A (Continued)

(Dollar amounts in thousands)

| Bureau/Appropriation | 1985 Estimate |  | 1986 Estimate |  | Change from 1985 |  |
|---|---|---|---|---|---|---|
|  | FTE/T | Amount | FTE/T | Amount | FTE/T | Amount |
| **Energy and Water Development Appropriations** |  |  |  |  |  |  |
| **BUREAU OF RECLAMATION** |  |  |  |  |  |  |
| **Appropriations:** |  |  |  |  |  |  |
| General Investigations | 583 | 35,566 | 575 | 32,050 | (8) | (3,516) |
| Construction Program | 4,068 | 740,000 | 4,062 | 532,430 | (6) | (207,570) |
| Operation and Maintenance | 2,647 | 149,689 | 2,500 | 132,665 | (147) | (17,024) |
| Loan Program | 22 | 67,537 | 22 | 41,415 | 0 | (26,122) |
| Emergency Fund | 0 | 1,000 | 0 | 1,000 | 0 | 0 |
| General Administrative Expenses (GAE) | 897 | 58,917 | 886 | 49,200 | (11) | (9,717) |
| Subtotal, appropriations | 8,217 | 1,052,709 | 8,045 | 788,760 | (172) | (263,949) |
| **Proposed 1985 Rescissions:** |  |  |  |  |  |  |
| General Investigations - Section 2901 | 0 | (209) | 0 | 0 | 0 | 209 |
| Construction Program - Section 2901 | 0 | (2,571) | 0 | 0 | 0 | 2,571 |
| Operation and Maintenance - Section 2901 | 0 | (1,540) | 0 | 0 | 0 | 1,540 |
| GAE - Section 2901 | (9) | (1,468) | 0 | 0 | 9 | 1,468 |
| Subtotal, rescissions | (9) | (5,788) | 0 | 0 | 9 | 5,788 |
| **Transfers:** |  |  |  |  |  |  |
| From: General Investigations - ($1,688,000, prior-year unobligated balance also transferred) | (10)[ | (1,688)] | 0 [ | 0] | 10 [ | 1,688] |
| To: SIR - GS |  |  |  |  |  |  |
| **Permanent Accounts:** |  |  |  |  |  |  |
| Colorado River Dam Fund, Boulder Canyon Project | 0 | 2,100 | 130 | 31,767 | 130 | 29,667 |
| Miscellaneous Permanent Appropriations | 0 | 350 | 0 | 350 | 0 | 0 |
| Reclamation Trust Funds | 7 | 6,880 | 7 | 18,711 | 0 | 11,831 |
| Subtotal, permanent accounts | 7 | 9,330 | 137 | 50,828 | 130 | 41,498 |
| TOTAL, BUREAU OF RECLAMATION | 8,205 | 1,056,251 | 8,182 | 839,588 | (23) | (216,663) |
| TOTAL, ENERGY AND WATER DEVELOPMENT | 8,205 | 1,056,251 | 8,182 | 839,588 | (23) | (216,663) |
| (Appropriations) | 8,217 | 1,052,709 | 8,045 | 788,760 | (172) | (263,949) |
| (Rescissions) | (9) | (5,788) | 0 | 0 | 9 | 5,788 |
| (Transfers) | (10) | 0 | 0 | 0 | 10 | 0 |
| (Permanents) | 7 | 9,330 | 137 | 50,828 | 130 | 41,498 |

TABLE A (Continued)

(Dollar amounts in thousands)

| Bureau/Appropriation | 1985 Estimate |  | 1986 Estimate |  | Change from 1985 |  |
|---|---|---|---|---|---|---|
|  | FTE/T | Amount | FTE/T | Amount | FTE/T | Amount |
| TOTAL, DEPARTMENT OF THE INTERIOR........... | 72,679 | 6,601,501 | 70,307 | 5,635,071 | (2,372) | (966,430) |
| (Appropriations)....................... | 67,707 | 5,307,225 | 65,388 | 4,380,514 | (2,319) | (926,711) |
| (Supplementals)........................ | 52 | 6,794 | 0 | 0 | (52) | (6,794) |
| (Rescissions).......................... | (9) | (42,389) | 0 | 0 | 9 | 42,389 |
| (Transfers)............................ | 0 | 0 | 0 | 0 | 0 | 0 |
| (Permanents)........................... | 1,077 | 1,359,071 | 1,120 | 1,284,557 | 43 | (74,514) |
| (Supplementals - permanent accounts).. | 0 | 800 | 0 | 0 | 0 | (800) |
| (Rescissions - permanent accounts).... | 0 | (30,000) | 0 | (30,000) | 0 | 0 |
| (Other)................................ | 3,852 | 0 | 3,799 | 0 | (53) | 0 |

TABLE 5

DEPARTMENT OF THE INTERIOR

Current Estimates of Receipts
FY 1984, 1985, and 1986

(In thousands of dollars)

| Source Category | FY 1984 Actual | FY 1985 Estimate | FY 1986 Estimate | Increase (Decrease) FY 1986 Over FY 1985 |
|---|---|---|---|---|
| OFFSETTING RECEIPTS | | | | |
| Onshore Mineral Leasing | | | | |
| Rents and Bonuses | | | | |
| Oil and Gas | $148,832 | $190,405 | $200,812 | $10,407 |
| Coal | 23,803 | 25,152 | 32,325 | 7,173 |
| Geothermal | 13,949 | 6,834 | 4,877 | (1,957) |
| Oil Shale | 5 | 5 | 5 | 0 |
| All Other | 25 | 949 | 956 | 7 |
| Royalties | | | | |
| Oil and Gas | 900,383 | 865,988 | 827,904 | (38,084) |
| Coal | 80,846 | 86,693 | 136,894 | 50,201 |
| Geothermal | 5,707 | 5,695 | 9,564 | 3,869 |
| Oil Shale | 3 | 0 | 0 | 0 |
| All Other | 23,757 | 31,876 | 33,741 | 1,865 |
| Subtotal, Onshore Mineral Leasing | 1,197,310 | 1,213,597 | 1,247,079 | 33,482 |
| Noncompetitive Filing Fees | (4,567) | 30,000 | 30,000 | 0 |
| Grazing Fees | 16,564 | 15,885 | 23,407 | 7,522 |
| Timber Fees | 188,686 | 173,619 | 64,083 | (109,536) |
| Recreation Entrance/Use Fees | 41,831 | 39,107 | 71,237 | 32,130 |
| All Other Fees, Licenses and Commissions | 11,816 | 9,093 | 5,843 | (3,250) |
| Rent of Land | 17,319 | 40,273 | 40,365 | 92 |
| Sale of Land, Buildings and Other Property | 91,844 | 87,797 | 86,180 | (1,617) |
| Alaska Native Fund and Awards for Indian Claims | 31,964 | 75,000 | 75,000 | 0 |
| Offsetting Interest | 88,490 | 79,676 | 78,229 | (1,447) |
| All Other Offsetting Receipts | 31,674 | 52,319 | 67,187 | 14,868 |
| Subtotal, Offsetting Receipts | 1,712,930 | 1,816,366 | 1,788,610 | (27,756) |
| UNDISTRIBUTED PROPRIETARY RECEIPTS | | | | |
| OCS Mineral Leasing | | | | |
| Rents and Bonuses | 3,494,937 | 1,675,000 | 2,415,000 | 740,000 |
| Royalties | 3,149,990 | 3,627,000 | 3,345,000 | (282,000) |
| Escrow Payout | 48,832 | 0 | 1,557,000 | 1,557,000 |
| Subtotal, OCS Mineral Leasing | 6,693,759 | 5,302,000 | 7,317,000 | 2,015,000 |
| Interest on Escrow Payout | 17,808 | 0 | 953,000 | 953,000 |
| Subtotal, Undistributed Proprietary Receipts | 6,711,567 | 5,302,000 | 8,270,000 | 2,968,000 |
| GOVERNMENTAL RECEIPTS | | | | |
| Mined Land Reclamation Fee | 214,897 | 218,620 | 229,059 | 10,439 |
| All Other Non-offsetting Receipts | 22,130 | 35,777 | 35,140 | (637) |
| Subtotal, Governmental Receipts | 237,027 | 254,397 | 264,199 | 9,802 |
| UNDISTRIBUTED INTERFUND RECEIPTS | | | | |
| Non-offsetting Interest | 44,904 | 38,324 | 36,904 | (1,420) |
| Total Receipts | $8,706,429 | $7,411,087 | $10,359,713 | $2,948,626 |

## TABLE C

## FY 1985 SUPPLEMENTAL APPROPRIATION REQUESTS

### Program Supplementals

(Dollar amounts in thousands)

| Bureau/Appropriation | FTE/T | Amount Requested |
|---|---|---|
| MINERALS MANAGEMENT SERVICE | | |
| Payments to States from Receipts Under Mineral Leasing Act -- For interest payments to States and Indian accounts. | -- | $ 800 |
| OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT | | |
| Regulation and Technology -- For Federal regulatory program in Tennessee and improved penalty assessments and collections. | 52 | 4,800 |
| TERRITORIAL AND INTERNATIONAL AFFAIRS | | |
| Administration of Territories -- For Northern Mariana Islands Covenant inflation adjustment. | -- | 1,994 |
| Subtotal, Program Supplementals | -- | 7,594 |

### Fire Suppression Supplementals

To be derived by transfer from National Park Service, Consttuction (Trust Funds) to restore funds transferred to other accounts to cover costs of 1984 fire fighting and emergency rehabilitation of burned-over lands. (Does not include $4.9 million from National Park Service, National Capital Region Arts and Cultural Affairs, to be transferred to Bureau of Indian Affairs (BIA), Construction in FY 1986 to cover remaining FY 1984 BIA fire costs.)

| Bureau/Appropriation | FTE/T | Amount Requested |
|---|---|---|
| BUREAU OF LAND MANAGEMENT | | |
| Oregon and California Grant Lands | -- | (3,000) |
| Land Acquisition | -- | (2,000) |
| U.S. FISH AND WILDLIFE SERVICE | | |
| Construction and Anadromous Fish | -- | (4,000) |
| NATIONAL PARK SERVICE | | |
| Land Acquisition and State Assistance | -- | (3,216) |
| BUREAU OF INDIAN AFFAIRS | | |
| Construction | -- | (12,850) |
| Subtotal, Fire Suppression Supplementals (derived by transfer) | -- | (25,066) |

### Pay Supplementals

| Bureau/Appropriation | FTE/T | Amount Requested |
|---|---|---|
| BUREAU OF LAND MANAGEMENT | | |
| Management of Lands and Resources -- To be derived by transfer from NPS, Construction (Trust Fund). | -- | (2,000) |
| OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT | | |
| Regulation and Technology -- To be derived by transfer from OSM, Abandoned Mine Reclamation Fund prior-year unobligated balances. | -- | (455) |
| NATIONAL PARK SERVICE | | |
| Operation of National Park System -- To be derived by transfer from NPS, Construction (Trust Fund). | -- | (10,700) |
| BUREAU OF INDIAN AFFAIRS | | |
| Operation of Indian Programs -- To be derived by transfer from BIA, Construction. | -- | (5,000) |
| OFFICE OF THE SOLICITOR -- To be derived by transfer from NPS Construction (Trust Fund). | -- | (406) |
| Subtotal, Pay Supplementals (derived by transfer) | -- | (18,561) |

TABLE C (Continued)

FY 1985 SUPPLEMENTAL APPROPRIATION REQUESTS

Language Supplementals

(Dollar amounts in thousands)

| Bureau/Appropriation | FTE/T | Amount Requested |
|---|---|---|
| FISH AND WILDLIFE SERVICE | | |
| Resource Management -- To reduce the amount of funds required to be obligated for the Youth Conservation Corps program from $3.3 million to $1.3 million. | -- | -- |
| NATIONAL PARK SERVICE | | |
| Operation of the National Park System -- To reduce the amount of funds required to be obligated for the Youth Conservation Corps program from $3.4 million to $1.5 million. | -- | -- |
| Total, FY 1985 Supplemental Appropriations | 52 | $ 7,594 |

TABLE D

## PROPOSED FY 1985 RESCISSIONS AND DEFERRALS

(In thousands of dollars)

| Bureau/Appropriation | Appropriation Enacted | Rescission/ Deferral | Amount Remaining |
|---|---|---|---|
| **SECTION 2901 RESCISSIONS:** | | | |
| BUREAU OF LAND MANAGEMENT | | | |
| Management of Lands and Resources ............ | $ 385,972 | $ -5,778 | $ 380,194 |
| Oregon and California Grant Lands ............ | 54,289 | -679 | 53,610 |
| Working Capital Fund .......................... | -- | -2,951 1/ | -- |
| Subtotal .................................... | | -9,408 | |
| MINERALS MANAGEMENT SERVICE | | | |
| Leasing and Royalty Management ............... | 163,482 | -1,764 | 161,718 |
| OFFICE OF SURFACE MINING | | | |
| Regulation and Technology .................... | 75,092 | -546 | 74,546 |
| Abandoned Mine Reclamation Fund .............. | 296,941 | -333 | 296,608 |
| Subtotal .................................... | | -879 | |
| BUREAU OF RECLAMATION | | | |
| Construction Program ......................... | 740,000 | -2,571 | 737,429 |
| General Investigations ....................... | 35,566 | -209 | 35,357 |
| Operation and Maintenance .................... | 149,689 | -1,540 | 148,149 |
| General Administrative Expenses .............. | 58,917 | -1,468 | 57,449 |
| Subtotal .................................... | | -5,788 | |
| GEOLOGICAL SURVEY | | | |
| Surveys, Investigations and Research ......... | 412,251 | -4,519 | 407,732 |
| BUREAU OF MINES | | | |
| Mines and Minerals ........................... | 135,959 | -1,355 | 134,604 |
| FISH AND WILDLIFE SERVICE | | | |
| Resource Management .......................... | 305,138 | -3,869 | 301,269 |
| Construction and Anadromous Fish ............. | 24,298 | -40 | 24,258 |
| Subtotal .................................... | | -3,909 | |
| NATIONAL PARK SERVICE | | | |
| Operation of the National Park System ........ | 612,858 | -8,598 | 604,260 |
| Construction ................................. | 111,442 | -397 | 111,045 |
| National Recreation and Preservation ......... | 11,111 | -94 | 11,017 |
| Land Acquisition and State Assistance ........ | 147,216 | -52 | 147,164 |
| Subtotal .................................... | | -9,141 | |
| BUREAU OF INDIAN AFFAIRS | | | |
| Operation of Indian Programs ................. | 877,916 | -5,570 | 872,346 |
| OFFICE OF TERRITORIAL AND INTERNATIONAL AFFAIRS | | | |
| Administration of Territories ................ | 75,557 | -107 | 75,450 |
| Total, 2901 Rescissions ............... | | -42,440 2/ | |
| **OTHER RESCISSIONS:** | | | |
| OFFICE OF SURFACE MINING | | | |
| Abandoned Mine Reclamation Fund (Tennessee Grant Funds) .................... | 295,941 | -2,900 | 294,041 3/ |
| NATIONAL PARK SERVICE | | | |
| Land Acquisition and State Assistance (Contract Authority) ...................... | 147,216 | -30,000 | 117,216 4/ |
| Total, Other Rescissions .............. | | -32,900 | |

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1/ From unobligated balances.

2/ Excludes Section 2901 savings of $526,000 in the Office of the Secretary and $376,000 in the Office of the Inspector General which will be used to partially offset costs of the 1985 pay increase.

3/ Excludes Section 2901 rescission of $333,000.

4/ Excludes Section 2901 rescission of $52,000.

TABLE D (Continued)

PROPOSED FY 1985 RESCISSIONS AND DEFERRALS

(In thousands of dollars)

| Bureau/Appropriation | Appropriation Enacted | Rescission/ Deferral | Amount Remaining |
|---|---|---|---|
| **DEFERRALS** | | | |
| NATIONAL PARK SERVICE | | | |
| Construction (Trust Fund) ..................... | 14,000 5/ | -10,172 6/ | 3,828 |
| Construction (Trust Fund) ..................... | 28,000 5/ | -28,000 6/ | --- |
| Land Acquisition and State Assistance ......... | $ 147,216 | $ -2,901 7/ | $ 144,315 8/ |
| Total, Deferrals ....................... | | $ -41,073 | |

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5/ Appropriation to liquidate contract authority for the Cumberland Gap Tunnel project were provided in 1984 ($14 million) and 1985 ($28 million) Construction appropriations.

6/ Deferral pending Congressional consideration of supplemental appropriation language to transfer funds to other accounts for pay costs in BLM, NPS, and SOL and to restore funds transferred out for 1984 fire protection costs.

7/ Proposed appropriation language would make $852,000 of State grant contingency funds available for State grant administration.

8/ Excludes proposed rescissions of $30,052.

The CHAIRMAN. All right. Then I yield at this time to Senator Wallop.

Senator WALLOP. Thank you, Mr. Chairman, and welcome to you, Don. I have some questions and some I will submit for the record in the interest of time.

### MINERAL LEASING ADMINISTRATIVE COSTS

In the budget proposal let's begin with the Minerals Management Service, in which you propose that the relevant onshore mineral leasing administrative costs of MMS and BLM and the Forest Service be deducted from Federal onshore mineral leasing receipts before such receipts are distributed to the States.

You propose that the $125.2 million come off the top as follows: MMS costs, $33 million; BLM, $65 million; BLM administration, $11.9 million—actually, that's $66 million and $12 million; and Forest Service minerals $14 million, for a total of $125 million. It's not the first time around for this proposal; we've seen it for the last 3 years.

This time, if you examine it, it looks like that if any MMS employee, no matter how obscure or no matter what desk he sat at, had a passing thought about the mineral royalty distribution it was counted at about $100 an hour. If memory serves me, the last time the administration opposed cost-sharing, the total was around $25 million. Now how did we get to $125 million?

And, further, I don't understand how we can justify what will amount to a $53 million reduction for fiscal 1986, of which the State of Wyoming shoulders $20 million, very significant, when that State, my State, performs the majority of the administrative costs for BLM. And this was long before the State signed a delegated audit authority with MMS last month.

As a matter of fact, I was told that in the last 6 months one part-time Wyoming inspector inspected more wells than four full-time BLM employees. We have a willingness to share, but I think, you know, somehow or another the figures have grown way beyond any reason.

Secretary HODEL. Senator, you're far better equipped than I on this subject.

Senator WALLOP. I apologize for that.

Secretary HODEL. No, no. Don't apologize. I should apologize to you for not knowing more about this proposal. But you have confirmed a suspicion which I have previously raised with the staff in preparations for this hearing.

I did suggest that the States quite properly would insist that they review our costs if we were going to attempt to assess them as part of the collection costs, that we could not simply blanket everything that we thought remotely might relate to this and include it in our costs and say all right, that's got to come off the top before the States get their share.

What you've suggested further is that perhaps even then we get down not only to a dollar cost audit but a performance audit. If one State inspector can do effectively what it's taking four of ours to do, what it tells me is two things: We're not doing it well and perhaps we shouldn't be doing it at all and we ought to have someone else doing it.

### MINERAL LEASING ADMINISTRATIVE COSTS

The basic premise, however, I think is one that we're going to continue to propose as an administration, and that is that assuming proper costs are attributed, if we're going to share the revenues with the States it should be the net revenues that are shared and not the gross. Now, admittedly this would have an adverse effect on the receipts by the State, but I'm sure you're aware also that currently, at least with the costs we're attributing to this collection, the Federal Government is getting quite a relatively small amount compared to what goes to the States from the collection.

We're not sharing 50/50 with the States; we are sharing more like 2 to 1 with the States by the time we deduct these kinds of costs.

Senator **WALLOP**. It depends, of course, on which State. We've been rather more advanced in that than perhaps some of the other States, admittedly out of self interest, because it has raised our royalty distribution to have done a better job of collection.

We'll be very interested to see how those are justified and want to be working quite closely in that process, because it seems to me that it would be even, at this moment in time at least, it would be in both the Government's interest and the State of Wyoming's interest to let us go ahead and do it with no charge, you know, and we'll just take the distribution and do the collection, because we seem to be more efficient at it and that benefits us both.

Secretary **HODEL**. In fact, Senator, I think that philosophically, it would be much more acceptable to this administration to have State responsibility with Federal Government oversight to assure that it's being done properly than to have the Federal Government out there attempting to do it in all cases. So I think we're amenable to that.

I understand also that your first question was why the change in the estimated amounts. Last year the amount was restricted that was proposed for cost-sharing. It was restricted to the direct overhead and administrative costs of MMS, and this time, as you have suggested, it was expanded to include essentially what was thought to be the whole cost of the collection process.

Senator **WALLOP**. Well, what I would hope is that maybe in as much as Congress has consistently, or at least the last three times, rejected these kinds of proposals that it would be more appropriate to send it up through the appropriate authorizing committees than make it as a budget proposal. That leaves this committee, an authorizing committee, in the peculiar position of not being able to meet the target that the administration sends down for right and proper reasons, and not for budgetary reasons.

Maybe if we could work together. I don't anticipate it would delay it. I just think that we really need to do it differently than this proposal would indicate.

Secretary **HODEL**. I appreciate that.

Senator **Wallop**. I have one other, question and I have several that I will submit or ask if others haven't come after there's been a round.

### GRAZING FEES

In the 1985 continuing resolution the House included legislative language in the range improvements portion of the BLM budget which was adopted by the conferees and, just to refresh you, because you know the area that I would be touching, it states in part:

> Provided, further, that the dollar equivalent of value in excess of the grazing fee established under law and paid to the United States Government received by any permittee or lessee as compensation for an assignment or other conveyance of a grazing permit or lease or any other grazing privilege or rights thereunder, and in excess of the installation and maintenance costs of grazing improvements provided for by the permittee in the allotment management plan or amendments otherwise approved by the BLM, shall be paid to the Bureau of Land Management and disposed of as provided for by Section 401(b) of the Federal Land Policy and Management Act.
>
> Provided, further, that if the dollar value prescribed above is not paid to the Bureau of Land Management the grazing permit or lease shall be cancelled.

What my question is that while the objectives may have been well intended, the result, particularly concerning assignment or conveyance of base properties and permit value, may be bad news for small ranchers currently facing tough times. And the language is technically incorrect and overreaches the problem.

I have asked both the Department of the Interior and the Forest Service for a draft to correct the technicalities and the cloud on valuation. I wonder if you would do me the favor of giving some attention to that problem and its resolution, because we at this moment still haven't gotten anywhere on it.

Secretary **Hodel**. You haven't heard from them?

Senator **Wallop**. No.

Secretary **Hodel**. All right. Yes, I will pursue that, Senator.

Senator **Wallop**. I'm going to pursue the same question with the Forest Service.

Secretary **Hodel**. Yes, I will pursue that.

Senator **Wallop**. I appreciate it. Mr. Chairman, I'll wait until others, and then if there's time I'll ask another question.

The **Chairman**. Thank you very much, Senator.

Senator Bingaman.

### BLM-FOREST SERVICE INTERCHANGE OF LAND

Senator **Bingaman**. Thank you very much, Mr. Chairman.

Let me just ask about the proposal which has been publicly discussed recently regarding the BLM-Forest Service interchange of land. It's my understanding that there is nothing that will take place in that respect administratively, that it all awaits some action by the Congress before any actual exchange of land occurs. Is that accurate?

Secretary **Hodel**. Senator, I think that the words "all awaits action" may be too strong. It's my understanding that most of the proposed interchange could not take place without congressional action, and that, without personally knowing what they are, there are some areas of it which may be within the jurisdiction of the two bureaus, the Forest Service and the Bureau of Land Management, to affect directly.

It is with respect to that latter part that we've emphasized we are not proposing to do it in any irrevocable fashion without full consultation, which is ongoing, as I am sure you're aware, both in the affected areas as well as here. One of the things that is under exploration is the possibility of what's called dual-hatting, which is where a forest ranger may be asked to oversee adjacent BLM lands pursuant to the BLM rules in that area—not changing jurisdictions, not changing the rules, but seeing if we can't begin some of those kinds of oversights.

Now that's something again that I think has to be done on a case-by-case basis pursuant to the discussions that are ongoing. I think in all accuracy that's a fairer characterization of what's under consideration.

Senator BINGAMAN. So when you say nothing, that no exchange would occur in any irrevocable fashion, I think was the phrase you used, you're talking about this dual-hatting, which will go forward in certain circumstances?

Secretary HODEL. I have to say we are looking at the possibility of that going forward, and even that, as far as I know, has not been determined. If in given cases it appears to be appropriate then the Secretary of Agriculture and I presumably would agree, and the bureaus would attempt to begin that process.

But at this point I know of none that actively are under way, and I would hope I would be informed before they were.

### BLM-FOREST SERVICE EXCHANGE OF LAND

Senator BINGAMAN. OK. We would obviously hope we were, too.

Secretary HODEL. I understand.

Senator BINGAMAN. If possible, could you identify if there are fiscal year 1986 budget implications involved in this proposed interchange for the BLM?

Secretary HODEL. Yes, there are a number that are spelled out in the budget. Among them, because some of the BLM forest lands would be transferred to the Forest Service, assuming this was agreed to, the receipts by the Bureau of Land Management would be reduced. They then would be receipts in the Forest Service.

The BLM would have a lower level of receipts and the Forest Service higher. The estimates of cost of management would be a savings in the range of $30 million, assuming that the whole thing went through and was effective at once. That's a qualifier which I am sure you can appreciate that wouldn't in fact take place.

This is not something that could occur in the first year.

Senator BINGAMAN. To go back to the point I was making in my first question, would it be possible, Mr. Chairman—please tell me if this is appropriate—to ask that this Committee be informed before any of this dual-hatting arrangement is agreed to or at such time as it might take place so that we would be in a position to explain or complain with respect to the impact in our respective States?

Is that appropriate, Mr. Chairman?

## BLM-FOREST SERVICE INTERCHANGE OF LAND

The CHAIRMAN. I think it would be very appropriate to ask that. Certainly the Chairman has the same interest as the Senator from New Mexico. We would make that request, Mr. Secretary.

Without being unduly restrictive, I do believe that every member of this Committee, and every member of the Senate, who comes from public land States are going to be very, very interested in the progress of this initiative. While I share its objectives and I hope we're able to implement it and I hope it will find widespread acceptance after we have had a chance to analyze it, I think moving prematurely on it or more hastily may obstruct the acceptance that otherwise might come about.

So I would hope that we do get information. In my State, as the Secretary knows, I have urged that this be done for some time. We have some scattered tracts of BLM lands that are obviously so isolated from other BLM lands that it doesn't make any sense at all to have a BLM office in areas where there are very few lands, and there are Forest Service lands and Forest Service offices.

I would not want to stand in the way of any transfer or dual hatting of those areas, but, on the other hand, I would appreciate knowing about it before it was done so that we could talk to people in the area.

Senator WALLOP. Mr. Chairman, if the Senator from New Mexico and the Chairman would yield, I have asked both Bob Burford and Max Peterson to hold some hearings in the affected areas. It seems to me it's almost their obligation to create the case and consensus and bring it to us. I mean, I am like the Chairman. I see much potential good out of some of it, and some potential harm out of some of it.

I think it really requires that kind of an examination, and since it's those agencies whose responsibility it is to manage that land, it seems to me that their obligation is to kind of justify it on the ground and bring it to us so that we can cooperate, if we can, or, as you said, complain if we must.

Senator BINGAMAN. Sure. Let me just ask, Mr. Secretary, are there public hearings that are presently scheduled for discussion of this interchange that you're aware of?

Secretary HODEL. I have to say I have the impression that they have been scheduled, but I can't document that. I believe there are numerous discussions planned. Let me say that I'd be happy to respond to your inquiry, Mr. Chairman. I will see to it that we communicate with you prior to taking actions even of the dual-hatting type that were discussed here.

Senator BINGAMAN. That would be helpful. And also if there are already some hearings scheduled in the West on this, I would be anxious to know the time and place of those hearings, in case any of them affect my State in particular.

Secretary HODEL. We will try to supply the committee with the hearing schedules, meeting schedules, whatever.

The CHAIRMAN. Would the Senator yield on that point?

Senator BINGAMAN. Certainly.

The CHAIRMAN. I think there are some informal discussions going on now, a great number of them, as a matter of fact, by district directors of the BLM and by forest supervisors or rangers on the districts. I will supplement the request that is being made of you, Mr. Secretary, that to the extent that we can, and that the district directors can provide that information, that they do so—and the State directors—on a very expeditious schedule.

We will also make a similar request to the Forest Service so that whatever activities they are involved in we'll be notified of as well.

Secretary HODEL. I will seek to get that pulled together promptly and up to the Committee.

### FEDERAL OIL AND GAS ROYALTY MANAGEMENT ACT

Senator BINGAMAN. Thank you. Let me ask a question on another subject. There has been a lot of discussion in my home State, and I'm sure in a lot of other States in the West, about the Federal Oil and Gas Royalty Management Act regulations that went into effect last October. I know we've sent a letter to you expressing our concerns about the regulations and their enforcement.

I understand there's been a recent action to refine portions of those regulations and to hold public hearings, one of which you held in New Mexico, which allowed the industry the opportunity to voice its concerns.

Could you tell me what the current timetable is for completing the review of those regulations?

Secretary HODEL. When I have asked that question, I've been told sometime in the next several weeks, because there have been a series of meetings and the Director of the Bureau of Land Management is expecting to receive a report on the content of those meetings.

I don't know with what speed he will process that before coming forward with further changes. Now my understanding is that we did in fact make some adjustment in those regulations, pending even the outcome of the hearings, by capping the penalties that were involved. But I have heard a great deal of complaint about those regulations. I know the BLM has also, and I would expect to be receiving a communication from him within the next several weeks.

Senator BINGAMAN. Since a lot of the concern, at least in my State, relates both to the regulations and to their enforcement, I just wonder if there is any provision that you're making for special training for field inspectors in enforcing these revised regulations once they're completed, and if you have any money in your budget to do that.

Secretary HODEL. I do not know the answer to that question. I would be surprised if there were no training planned and it would surprise me if the budget of the BLM wasn't large enough to encompass that kind of training in the guidelines on enforcement. But I do not know directly.

### BLM RECREATION MANAGEMENT BUDGET

Senator BINGAMAN. Let me just inquire on one other subject, and then I'll let others go ahead. As I understand, the BLM's recreation management budget funding in four areas—wilderness, critical resources, areas of critical environmental concern, and recreation resources. We've had a problem in New Mexico recently with the theft of several large petrified logs from one of our wilderness areas because of lack of adequate monitoring of this area.

I just wondered whether you feel that the budget you and the President has proposed is going to provide adequate resources to effectively carry out your mandate in this area.

Secretary HODEL. Senator, I have not pursued that question in preparation for these hearings. I did pursue the general question of whether the moneys in the budget were adequate to do the jobs that these various bureaus had to do, and I received generally reassuring comments on that. I have to qualify it because in fact in this budget, which is a very stringent budget, nobody's getting as much money as they would like for the things they would like to do.

But not knowing the specifics of the case you identify, but knowing that hundreds of millions of acres of land are under BLM management, and having had experience with just a limited number of acres when I was at the Bonneville Power Administration as administrator, and we had some 50,000 transmission towers in the Pacific Northwest on 12,000 miles of right-of-way, it was not possible for us to guard those transmission towers; it physically was impossible to guard them.

We had a bombing incident in which we became acutely aware of that. Even with tremendously increased expenditures in a limited part of our service area, we were unable to provide complete surveillance of the towers and prevent them from being bombed.

I am not particularly optimistic we can protect all of the time all of the resources that are under our management in the fashion that would always prevent the situation that you described from taking place. I think we can do the best we can. I have been informed the money in the BLM budget for this account has not been changed from the 1985 level. It was not reduced. It's $18.4 million.

But it's a broader, problem and I don't know that there are enough people or enough money in the Federal Treasury always to protect all the resources.

Senator BINGAMAN. That's all I had, Mr. Chairman. Thank you very much, Mr. Secretary.

Secretary HODEL. Thank you, Senator.

The CHAIRMAN. Thank you, Senator.

Senator WARNER.

## LAND ACQUISITION

Senator WARNER. Thank you, Mr. Chairman, and again we welcome the Secretary. Personally I am extremely pleased that you have extended your service to the Nation in this particular post.

Turning to the question of land acquisition for parks, refuges and wetlands, my calculations indicate you've got about $150 million obligational authority. I wonder if you might summarize your approach to this issue; have you established criteria on the assumption you're going to go ahead within that obligational limit?

Secretary HODEL. Senator, I have a several-tiered answer. My approach to the issue is that it appears to me we should move as aggressively as it is possible for us to acquire land within the boundaries of designated parks and wilderness areas because of concern for the protection of the park or the wilderness or the refuge and because of recognition of the burden it imposes upon the owner of those lands if we attempt to prevent them from doing something with their land now that we've encompassed it within the boundary. So I think we have an obligation to try to do it. That's tier one.

Tier 2 is that we do have money available to us this year to do some additional land acquisition. The priorities in that area will largely be set by the professional people on the staffs of the various bureaus that are responsible. The Park Service, Fish and Wildlife Service will very much weigh very, very heavily, in my view, as to how we ought to put the money, except in those cases where the Congress directs us to override the professional view for whatever reasons that are satisfactory to the Congress, in which case we will follow the congressional mandate.

And, finally, that's the second tier. The third tier answer is that in spite of this desire and the carryover funds, we're not asking for any significant amount of money from the land and water conservation fund for acquisition this time, and that is directly a result of the budget requirement—the deficit problems that we all encounter.

Senator WARNER. So it doesn't signal any sort of negative approach on your part. It is recognition of the deficit situation and that you have carryover funds?

Secretary HODEL. Yes, but it will mean that next year we will not likely have any significant amount of carryover funds, and I need to recognize that in the following year. But it does not represent in any way a desire on our part not to complete those acquisitions that ought to be made, and we will pursue aggressively the alternative means of exchange or easements that may permit us to protect the areas and acquire whatever rights we can at a less costly basis.

## IMPORTING COAL

Senator WARNER. Turning to the subject of coal, one that you and I have worked on for many years, with the approval of the chairman it is my intention to hold hearings on the domestic coal industry and particularly on the fact that it appears that for the first time in history the United States is importing some significant quantity of coal.

Now it is my understanding that the Bureau of Mines is conducting an analysis of the potential impact on the domestic coal industry of the announced plans, particularly of the Government of Colombia, to increase production of coal and electricity. Would you kindly advise the committee with respect to the status of that study and whether or not it can be incorporated as a part of the hearing, as I would propose to the chairman?

Secretary HODEL. It's my understanding that study has been completed and a copy should be made available to you forthwith, and that the basic conclusion of the study is that Colombia coal appears to be economically very competitive with U.S. coal production.

Senator WARNER. I think that we were aware of the conclusion before it was reached.

Secretary HODEL. From other causes, from other indicators.

### ABANDONED MINE LAND

Senator WARNER. Now turning to the abandoned mineland issue, would you provide for the record the most recently updated abandoned mineland inventory?

[The information follows:]

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

## STATE BY STATE INVENTORY
## OF
## PRIORITY ONE's AND TWO's
## AND
## THEIR ESTIMATED COST

| STATE | PRIORITY ONE & TWO PROBLEM AREAS | ESTIMATED RECLAMATION COST (MILLIONS) |
|---|---|---|
| ALABAMA | 60 | $ 13,800 |
| ALASKA | 1 | 10 |
| ARKANSAS | 10 | 1,130 |
| COLORADO | 4 | 120 |
| ILLINOIS | 55 | 26,100 |
| INDIANA | 28 | 8,840 |
| IOWA | 29 | 6,230 |
| KANSAS | 13 | 3,710 |
| KENTUCKY | 191 | 30,550 |
| MARYLAND | 10 | 960 |
| MISSOURI | 39 | 15,340 |
| MONTANA | 8 | 530 |
| NEW MEXICO | 7 | 1,110 |
| NORTH DAKOTA | 14 | 1,250 |
| OHIO | 96 | 79,240 |
| OKLAHOMA | 45 | 11,270 |
| PENNSYLVANIA | 500 | 367,530 |
| TENNESSEE | 30 | 9,260 |
| TEXAS | 0 | 0 |
| UTAH | 0 | 0 |
| VIRGINIA | 45 | 5,370 |
| WEST VIRGINIA | 138 | 43,730 |
| WYOMING | 9 | 14,800 |
| CROW TRIBE | 0 | 0 |
| HOPI TRIBE | 1 | 10 |
| NAVAJO TRIBE | 5 | 460 |
| FEDERAL STATES | 0 | 0 |
| TOTAL | 1,338 | $641,350 |

Note: Data is from the 4/83 National AML Inventory Report

Senator **Warner**. Second, according to your budget document, nearly 50 percent of the abandoned minelands causing threats to public health and safety are in five States, one of which I am privileged to represent, Virginia. Yet Virginia's abandoned mineland State grants program is cut almost 70 percent from this year's level.

Now in view of the life-threatening nature of these reclamation sites, I'm concerned about that substantial a cut.

Secretary **Hodel**. Senator, in attempting to become conversant with this issue I believe I was informed that the Office of Surface Mining ranks these various sites in terms of their risk to health and safety and to the environment. We have several categories, and there are some that clearly are abandoned mines but they don't have any current adverse human or environmental effects and they, of course, are on a lower priority corrections list.

It's my understanding that the funding is adequate for all that the State is able to accomplish and that the money we have requested in this budget should meet all of the requests from the States for abandoned mineland funds during fiscal year 1986. If that turns out not to be the case, we are committed to coming forward with a supplemental.

Senator **Warner**. I thank the Secretary for that representation. So it's just a question of determining the timing and the threat to our environment on the various mines individually.

Secretary **Hodel**. I believe that's the case, yes.

Senator **Warner**. Would you provide for the record a State-by-State breakdown of the AML funds which have been actually expended in comparison to the allocation which has been made to each State?

Secretary **Hodel**. Yes; we will supply that, together with the latest inventory, for the record.

[The information follows:]

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

## TOTAL AML GRANT AWARDS
## AND
## TOTAL STATE EXPENDITURES
## AS OF MARCH 31, 1985

(Dollars in millions)

| | TOTAL AWARDS AS OF 3/31/85 | TOTAL 1/ EXPENDITURES AS OF 3/31/85 |
|---|---|---|
| ALABAMA | 14,479 | 5,217 |
| ALASKA | 539 | 0 |
| ARKANSAS | 809 | 155 |
| COLORADO | 13,984 | 2,922 |
| ILLINOIS | 37,763 | 13,500 |
| INDIANA | 30,867 | 7,112 |
| IOWA | 3,087 | 163 |
| KANSAS | 2,025 | 239 |
| KENTUCKY | 87,352 | 39,809 |
| MARYLAND | 2,622 | 674 |
| MISSOURI | 28,776 | 1,226 |
| MONTANA | 23,811 | 9,747 |
| NEW MEXICO | 4,317 | 1,130 |
| NORTH DAKOTA | 8,303 | 3,218 |
| OHIO | 40,387 | 11,445 |
| OKLAHOMA | 6,274 | 2,969 |
| PENNSYLVANIA | 128,694 | 19,172 |
| TENNESSEE | 3,440 | 3,029 |
| TEXAS | 1,605 | 191 |
| UTAH | 3,087 | 1,823 |
| VIRGINIA | 31,052 | 13,804 |
| WEST VIRGINIA | 91,976 | 21,735 |
| WYOMING | 80,617 | 5,102 |
| CROW TRIBE | 0 | 0 |
| HOPI TRIBE | 0 | 0 |
| NAVAJO TRIBE | 0 | 0 |
| NATIONAL TOTAL | 645,866 | 164,382 |

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1/ Expenditures shown in this column are State letter-of-credit drawndowns against grant awards.

Senator **Warner**. Thank you, Mr. Secretary, and I thank the chairman.

The **Chairman**. Thank you.

Senator Evans.

### LAND ACQUISITIONS

Senator **Evans**. Mr. Chairman, let me follow up on some additional specifics on the moratorium or essential moratorium I understand you proposed in acquisition of lands and the largest of those reductions affects the National Park Service.

Could you give us some additional particulars as to what lands might otherwise have been the highest priority lands for acquisition? What are we likely to see delayed as a result and what are the chances that some or any of those lands that are just ahead of us in terms of acquisition might either not be available, might be changed radically in their makeup, or would cost substantially more if we delayed?

Secretary **Hodel**. Senator, the Park Service is preparing such a list. They were asked to provide it at a hearing they had last week, and are in the process of developing that, and as soon as that's ready I'd be happy to supply that to the committee.

[The information follows:]

## National Park Service Land Acquisition Priorities

The acquisitions on the following list are those which would be delayed as a result of the moratorium. The National Park Service assumes, from previous experience, that some escalation of land values might occur from the delay in acquisition. The Park Service is not aware of any instance where particular tracts would not be available for acquisiton or would be radically changed.

| | |
|---|---|
| Acquisition Management | $8,000,000 - Represents basic costs for management of the land acquisition program, including administration of the planned program of emergencies, hardships, deficiencies and relocations and accomplishment of donations and exchanges. Also includes a $1.1 million increase over the requested level, which would be used to increase staffing by 10 FTE (to 177 FTE) and for additional travel, rent, and other administrative costs necessary to implement a program at an increased level. |
| Deficiencies and Relocation | $6,000,000 - As of February 28, 1985, there were 618 tracts in condemnation. Funds would be used to pay anticipated high awards at such areas as Lassen Volcanic National Park, Mammoth Cave National Park, and Gulf Islands National Seashore. Funds would also be used to pay relocation costs that arise as the result of acquiring properties by condemnation or other means of acquisition. |
| Emergency and Hardships (RA) | $3,000,000 - Funds would be used to acquire hardship and emergency tracts at recently authorized areas for which funds are not otherwise available. |
| Inholdings | $6,000,000 - After fiscal year 1985, it is anticipated that there will be approximately 2,171 tracts consisting of 31,140 acres of private land remaining in inholding areas. The funds would be used at such areas as Blue Ridge Parkway, Grand Teton National Park, Hot Springs National Park, Olympic National Park, and Yosemite National Park. It is expected that the funds will permit the acquisition of approximately 150 inholding tracts. |

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|---|---|
| Big Cypress National Preserve | $2,000,000 - Approximately 2,300 acres remaining to be acquired. Funds would be used to complete the Land Protection Program. |
| Delaware Water Gap NRA | $3,000,000 - Funds would be used to continue the acquisition of hardship tracts. |
| Big Thicket N. Pres. | $6,000,000 - No funds were appropriated in FY 1985. Approximately 4,800 acres remain to be acquired. Timber cutting and recreational homesite development present potential threats. |
| Appalachian Trail | $9,000,000 - Approximately 25,000 acres remaining to be acquired. Funds would be used to acquire necessary trail right-of-way and interest in land for the protection of the trail. |
| San Antonio Mission NHP | $1,000,000 - Funds would be used to acquire approximately 100 acres to complete the land acquisition program. No funds were appropriated in FY 1985. |
| Cuyahoga Valley NRA | $5,000,000 - Funds would be used to prevent development. Approximately 8,800 acres remain to be protected. |
| War in the Pacific NHP | $1,000,000 - Funds would be used to acquire tracts in the Asan Bay area of the park that are threatened with development. Approximately 49 tracts and 239 acres remain to be acquired. |
| Channel Islands NP | $11,660,000 - The funds are the balance of the statutory ceiling. They, along with prior year appropriations, would be used to purchase the remaining islands. |
| Manassas NBP | $2,000,000 - 360 acres remain to be protected after FY 1985. The battlefield is threatened with residential and commercial development. Funds would permit the acquisition in fee and easement of approximately 200 acres. |

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| Alaskan Areas | $1,000,000 - Funds would be used to purchase permanent administrative sites where landowners do not wish to exchange lands. High-Priority needs are for Wrangell-St. Elias National Park, Lake Clark National Park, Kenai Fjords National Park and Cape Krusenstern National Monument. |
| Sequoia NP (Mineral King) | $2,500,000 - Funds would be used to continue the land acquisition program of the Mineral King addition in order to preserve the Sequoia trees and preclude recreational homesite development. |
| Sleeping Bear Dunes NL | $2,000,000 - Approximately 2,000 acres remain to be acquired. Funds would be used for completion of the Miller Hill unit and to commence acquisition in the Bow Lakes area. |
| Indiana Dunes NL | $1,000,000 - Funds would be used to complete the land acquisition program based on the approved Land Protection Plan. |
| Santa Monica Mtns NRA | $10,000,000 - Funds would be used to continue the land acquisition program in the Upper and Lower Zuma Canyons and Trancas Canyon sections of the park. |
| Mound City Group NM | $1,000,000 - Funds would be used to acquire lands added by Act of December 2, 1980. The lands contain archeological earthworks that are being destroyed by farming. |
| Golden Spike NHS | $298,000 - Funds would be used to acquire approximately 530 acres added in 1980. Remains of railroad construction workers' campsites are being threatened with erosion and cattle overgrazing. |
| Salinas NM | $500,000 - Funds would be used to protect the prehistoric Indian and 17th-century Franciscan Spanish Mission ruins and to provide for public access. |
| Monocacy NB | $600,000 - Funds would the permit acquisition of approximately 170 acres of Civil War battlefield land that is being threatened with development. |

| | |
|---|---|
| New River Gorge NR | $4,000,000 - Funds would permit the acquisition of approximately 800 acres of river-front and mountain-side land that is threatened with recreational homesite development and mining. |
| St. Croix NSR | $2,000,000 - Funds would permit the protection of approximately 1,280 acres in either fee or easement acquisition in accordance to priorities established in the Land Protection Plan. |
| Point Reyes NS | $2,000,000 - Approximately 950 acres remain to be acquired. Funds would permit the acquisition of tracts in the Haggerty Gulch and Inverness Ridge sections to preclude the threat of subdivision and development. |
| Jean Lafitte NHP | $2,000,000 - Funds would be used to acquire approximately 500 acres in the Protection Zone that the local governments have been unable to protect through zoning. |
| Saratoga NHP | $204,000 - This unappropriated balance of the statutory ceiling would be used to acquire scenic easement interest on lands that are being threatened with subdivision and development. |
| Golden Gate NRA | $5,000,000 - Funds would permit the acquisition of land on Sutro Heights and other priority tracts at Tomales Bay, Laquanitas Creek Loop and Devil's Gulch. |
| Lower St. Croix NSR | $300,000 - It is expected that these funds would complete the land acquisition program. |
| Antietam NB | $1,000,000 - Funds would be used to acquire scenic easement interest to retain the battlefield, which is threatened by urban development, in open space. |
| Rocky Mountain NP | $1,000,000 - Funds would be used to acquire land in the boundary expansion area of Kawuneeche Valley, Fall River, Moraine Park, Wild Basin and Indian Head Ranch. |
| Chattahoochee River NRA | $5,000,000 - Funds would be used to acquire a portion of the remaining 1,330 acres of private land that is being threatened with urban development. |

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|---|---|
| Valley Forge NHP | $1,000,000 - Funds would be used to acquire scenic easement and fee interest to protect the battlefield from commercial and multifamily unit development. |
| Lyndon B. Johnson NHP | $1,000,000 - The boundary of the historical Park was revised by the Act of December 28, 1980. The funds would permit the acquisition of high priority tracts needed for the protection of the Lyndon B. Johnson ranch. |
| North Cascades NP | $1,000,000 - Funds would be used to acquire the remaining 7 tracts (226 acres) in North Cascades National Park and 1 tract (155 acres) in Lake Chelan National Recreation Area. The funds would protect the North Cascades tracts from logging and mining. The Lake Chelan tract is threatened by adverse development and would be acquired with a combination of fee and scenic easement. |
| Appomattox Court House NHP | $50,000 - Funds would be used to acquire fee interest in a 22-acre tract currently protected by an inadequate scenic easement. |
| Ebey's Landing NHRes | $79,000 - This balance of the statutory ceiling would be used to acquire scenic easements in the Crockett Lake area of the reserve. |
| Fort Frederica NM | $1,000,000 - Funds would be used to acquire conservation easements over three tracts south of the fort to prevent development. |
| Virgin Islands NP | $3,000,000 - Approximately 1,560 acres remain to be protected. The funds would be used to acquire waterfront lands on St. John Island that are threatened with development, including a beach front tract in Hawksnest Bay. |
| Klondike Gold Rush NHP | $350,000 - Funds would be used to acquire 3 native allotments totalling 320 acres that cross the historic Chilkoot Trail. |
| Inholding | $4,000,000 - Funds would be used to permit the acquisition of an additional 100 inholding tracts. |

| | |
|---|---|
| Voyageurs NP | $1,000,000 - Funds would be used to continue the land acquisition program in the proposed wilderness area on Kabetogama Peninsula and other wilderness area tracts. |
| Santa Monica Mtns. NRA | $15,459,000 - Funds would be used to continue the land acquisition program in the Zuma and Trancas Canyon areas. |
| Grant-Kohrs Ranch NHS | $500,000 - Funds would be used to acquire fee over approximately 840 acres now protected by a weak scenic easement that allows incompatible farm and ranch uses. |
| Sleeping Bear Dunes NL | $2,000,000 - Funds would be used to continue the acquisition program in Bow Lakes, Tucker Lake units and to commence land acquisition in the Benzie County Scenic Corridor. |
| Cuyahoga Valley NRA | $5,000,000 - Funds would be used to continue the acquisition in fee and easement of undeveloped land that is being threatened with development. |
| Gulf Islands NS | $500,000 - The funds would be used to acquire the remaining 550 acres of private land on Horn Island. This island has been identified as a potential wilderness addition. |
| Point Reyes NS | $1,000,000 - Funds would be used to complete the acquisition of scenic easement interest in the Inverness Ridge area and to commence acquisition in the Tomales Bay area of the seashore. |
| War in the Pacific NHP | $1,000,000 - Funds would be used to continue the land acquisition program with emphasis on hardship acquisitions. |
| Cumberland Island NS | $2,000,000 - Funds would be used to acquire high priority tracts including tracts in the potential wilderness area. |
| Appalachian Trail | $2,000,000 - Funds would be used to accelerate the land acquisition program in the States of Maine and Pennsylvania. |
| Virgin Islands NP | $2,000,000 -Funds would be used to acquire additional private tracts on St. John Island. |
| Voyageurs NP | $1,000,000 - Funds would be used to accelerate the land acquisition program, with emphasis on the remaining tracts in the proposed wilderness areas and lakeshore tracts where potential for development is high. |

Secretary HODEL. My understanding is that, in spite of this budget proposal, we are committed with the $13 million that we have available not only for deficiency judgments which occur but also to be prepared for any emergency acquisitions that might be required—emergency being where it appears the land is likely to change character or something will be done which adversely will affect the park or the wilderness or the refuge.

We are hoping that, by whatever means of persuasion that are available to us short of dollars in hand to acquire the land, we'll be able to prevent any adverse effects. Before we'd permit those, we'd be back, I am sure, to the committee and say we've got to have assistance or a reprogramming in order to go forward, because we are not prepared to acquiesce in adverse treatment to the parks or the wilderness as a result of not acquiring that land.

Senator EVANS. And you will have for us, then, a more detailed list of what are the current priorities in terms of additional land acquisition?

Secretary HODEL. Yes; the current priorities. You also asked some other questions, which I trust my staff has noted, about such things as anticipated land values and the like. That is problematical in many of these areas.

Senator EVANS. I understand.

Secretary HODEL. The history, as you well know, has been that postponement has meant increased prices. There has been difficulty, I understand, with regard to the appraised values versus the apparent market value of the land, and in some instances it's become a stumbling block to our acquisition. I don't have a resolution to that, but it's an ongoing problem.

### CONSTRUCTION FUNDING

Senator EVANS. In your written statement you mention in relationship to the Bureau of Reclamation, on page 16, that a portion of the reduction in construction funding can be accommodated because construction prerequisites in some cases have not progressed as expected:

> On other projects, including Columbia Basin, Dolores, and some rehabilitation and betterment projects, work is closer to completion and program requirements have diminished accordingly.

Is that reference to the Columbia Basin in relationship to the first half or first phase of the Columbia Basin. As you are, I am sure, aware, we have two phases—one that is nearing completion or essentially complete, one that is still in the planning and developmental stages. And I guess I am particularly interested in how this budget would affect continuing planning and potential development of the second half of the Columbia Basin.

Secretary HODEL. The reference there apparently is to the budget documentation, which indicates that the third powerplant's major bank stabilization and other powerplant completion work is underway. Under the irrigation facilities program, work will continue on drainage and enlargement of a portion of the west canal under this budget, and work will remain under way on the environmental impact statement for the deferred and bypassed lands and the east high canal irrigation system.

There are still funds in the budget. What this does not indicate to me is whether or not there is any delay in the schedule from what the prior schedule may have been.

Senator EVANS. Could we get that from the Department—just an indication of whether the budget proposals will in any of those cases call for a delay in activity?

Secretary HODEL. Yes.

[The information follows:]

### COLUMBIA BASIN PROJECT, IRRIGATION FACILITIES, SECOND PHASE

Planning for the second phase of the Columbia Basin has not been delayed. The contract for preparation of the Environmental Impact Statement is scheduled to be awarded this summer. The final Environmental Impact Statement is scheduled to be filed in June 1987. Other planning activities are also continuing.

### COLUMBIA BASIN PROJECT, THIRD POWERPLANT

The fiscal year 1986 request will delay completion of the Third Powerplant by one year.

Senator EVANS. On page 19 you talked about an increase of $1.2 million to initiate or expand activities at eight mitigation facilities under the Lower Snake River compensation plan. I'm curious with that response to a mitigation plan what the Department's budget proposals would do this year in terms of funding for the various Mitchell Act hatcheries—famous or infamous.

Secretary HODEL. Senator, I do not have an answer for that, but I would be happy to try to supply that for the record.

Senator EVANS. I would be particularly interested if in fact the answer is that, as has been the case over the last several years, the proposal from the administration to eliminate funding, and I don't know if that's the proposal this year.

Secretary HODEL. Senator, I am informed by the budget officer for the Department that the Mitchell Act hatcheries are in the NOAA—National Oceanic and Atmospheric Administration—budget.

Senator EVANS. So you can't put on your old hat.

Secretary HODEL. I'll be happy to supply their material for the record.

### YAKIMA RIVER PROGRAM

Senator EVANS. I'll pursue that elsewhere, then.

OK, what about the new developments under essentially the Bureau of Reclamation on the Yakima River, the Yakima River enhancement programs, which just were initiated. Some construction is already underway. The other projects have been authorized and appropriated. Is there any proposal in this budget that would cause a delay in the completion of some or any of those projects?

Secretary HODEL. My understanding is that about $4.8 million was made available by the Congress last year for fish passage at Prosser and Roza Dams, but that the planning process and the design process have been such that only about $1 million of that can be utilized in this year.

In 1986, the planning report and environmental statement will be prepared, and I believe the funding in this budget is sufficient to take that next stage of the project in 1986—to carry that out in 1986.

Senator EVANS. We may have to deal further with that one just to make sure. It's certainly our intent, and as far as I understand the design work which has been carried out under contract with private agencies has been coming in ahead of schedule. I'm not sure that some of the design work that has been referred to the Bureau of Reclamation is on schedule, and if it isn't, I think there will be some considerable unhappiness in the area.

Secretary HODEL. I can understand that, Senator, and as a result of your inquiry, I will try to verify what the status is on the design. I believe it is correct to say that this budget does not contemplate delay as a result of the funding levels. That does not mean the work is being done at a rate which will prevent the delay, and we need to pursue that.

### POTENTIAL NEW HATCHERY SITES

Senator EVANS. Just one further question. In the continuing resolution the conference report of last year directed the Fish and Wildlife Service to provide a list of potential new hatchery sites, including evaluation of the Nisqually Tribe hatchery plans for increasing production in the Makah fish hatchery, an analysis of the *Boldt* case decisions and Salmon and Steelhead Act enhancement—in other words, to try to get a comprehensive picture of what the needs really are so that as we move ahead we are doing so in the appropriate way.

Can you tell me or could you provide for me the status of these various studies, the conclusions, if any, that have yet been reached, and, if not, when we are likely to have some response?

Secretary HODEL. I'm informed that the studies are underway. They are not due for completion yet. As soon as they are completed we will be more than happy to supply copies to you and to the committee.

Senator EVANS. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Ford.

### CUMBERLAND GAP TUNNEL

Senator FORD. Thank you, Mr. Chairman.

Mr. Secretary, I don't know how long we have this morning, but if I don't get through I would respectfully ask that you answer some questions I submit. You have always been timely and I compliment you on that. I have two or three items that hopefully I can get to this morning.

Mr. Secretary, the President has asked for the deferral of $38,171,683 appropriated by Congress for the Cumberland Gap Tunnel project. These moneys, derived from the Federal Highway Trust Fund, are to be spent to offset pay and firefighting cost within the Department of Interior. I refer you to page 10 of your statement, which says $25.1 million to reimburse a portion of the cost incurred for firefighting and related costs, $18.6 million to cover a portion of the cost of the January 1985 pay raise.

And underneath that, a significant amount of the funding proposed for transfer, $38.2 million, is from the Cumberland Gap Tunnel project.

Now would you please tell me and this committee the legality of using trust fund moneys for nonhighway purposes?

Secretary HODEL. Senator, I do not know the legality of it, and the only answer I probably can give at this point besides offering to review that and give you something further for the record, is that this is a proposal from us in the budget, in which we are asking the Congress in the budget to approve or in the appropriation act to approve our doing that, which hopefully would cure any legal defect.

It is not something we are doing. It is something we are proposing that we be permitted by the Congress to do.

Senator FORD. Could we have the Solicitor's opinion on this, please?

Secretary HODEL. Yes. I will ask the Solicitor.

[The information follows:]

## PROPOSED TRANSFER OF FUNDS FROM CUMBERLAND GAP TUNNEL

The Department's Solicitor has considered the legality of the proposed transfer of appropriations for the Cumberland Gap Tunnel project to cover fire fighting and pay costs and advises that the Administration's proposal is in accordance with law.

The appropriations in question were initially authorized by the Federal Aid Highway Act of 1973, which provided for relocation of U.S. Route 25E from its existing location through the Cumberland Gap National Historical Park to another alignment involving a 4,100 foot tunnel. (Section 160, P.L. 93-87, 87 Stat. 278 (1973)) An appropriation of $14 million was provided in the Department's FY 1984 Appropriations Act for a pilot tunnel bore and initial work on an approved road and four bridges. (P.L. 98-146, 97 Stat. 925 (1983)) An additional $28 million was appropriated in the Department's FY 1985 Appropriations Act. (P.L. 98-473, 98 Stat. 1843 (1984)) Both appropriations are no-year appropriations.

The Administration's FY 1986 budget proposes that the available balances of these appropriations, which will be available if the Congress approves our proposal to terminate this project, be transferred to cover fire fighting and pay supplemental costs. Pending Congressional action on this proposal, $34.7 million has been deferred from obligation.

The Solicitor advises that the deferral is in accordance with the Impoundment Control Act of 1974. (2 U.S.C. Sections 681-688 (1982)) Use of deferral authority to allow time for action on an Administration proposal is an established practice. If the proposal is not accepted, these no-year funds will remain available for obligation in the future, even though the current authorization for expenditure will lapse at the end of 1985. (GAO, Principles of Federal Appropriations Law 2-40 (1982))

As to the proposed transfer, the Solicitor points out that it is a request for legislation. If Congress enacts the legislation, it will remove any barrier that otherwise would exist and provide the authority necessary under the Highway Trust Fund law to effect the transfer. See 26 U.S.C. Section 9503(c)(1)(C).

Senator **Ford**. If he's got one. We've asked GAO and they've responded to it, and so I want to get into that a little bit further. I assure you, Mr. Secretary, this is going to be one that you're going to have a burr under your saddle from me.

I don't mean that I'm going to—I've been known as a street fighter and don't take you to the gutter, but I will go to the street on this one because this one—the cost ratio is excellent on this one. Environmentalists have agreed to it. We've worked it out over years.

It appears that my colleague who was defeated, someone had a card file on him and every project he had has been cancelled since November 6. I don't like it. And so we're going to get into that and this is just the beginning, and they're not all in your Department. I want you to know that.

Secretary **Hodel**. Senator, I was not aware of that aspect of it. I was aware that this is a proposal to cancel that project, that the Park Service view, I am informed, is that of the various items on the Park Service list this was the lowest priority, or a very—I shouldn't say that—a low priority.

Senator **Ford**. Well, the cost ratio is excellent, though, on this one, I think if you will check it.

Now let's just go a step further and I'll give you some more things to think about. The President tried to have the first installment of these funds, $14 million, deferred last year. The deferral was disapproved in July. The net effect of this second deferral is that some of the money is being deferred for the second time, not to mention the fact that twice funds have been appropriated for the project by Congress.

Let me just ask you a simple question. How many times does the Congress have to tell the Department to go through with construction of the Cumberland Gap Tunnel?

Secretary **Hodel**. Senator, I don't have an answer to that, obviously. I was not familiar with the history on the deferral, and it is a proposal on our part. At this time, in light of this current budget deficit, it's extremely difficult, and this project was one which on the priority list simply appeared to be one we should draw to the attention of the Congress.

Senator **Ford**. You don't say that in your statement, Mr. Secretary. In your statement it says it's because of its high cost. What if it would have only been $15 million? Would you have let it go on through? Or if it had been $75 million, it would have been a little bit higher so you would have really gotten that one.

I'm just saying "high cost." There are a lot of things out there that are high cost, but you get a cost ratio that's good. You get everybody in agreement. Twice now we've funded it. Once it was deferred by the President. We reiterated our desire to have it built. Now you are coming back at us again.

I just wonder how many times we have to go through it. I guess you can drag your feet up to a point where at some point you'll wear us out.

Secretary **Hodel**. Senator, I have tried in my past activities, and I will try here, not to seek to circumvent the directions of the Congress, but in this case in this budget it is proposed for cancellation, as you say, due not only to the high cost but, as I have indicated, because of the priorities of the other things that we are trying to continue within the Park Service.

I will get the Solicitor's opinion. I would expect it to say that without a change of the law we're not able to do this, and this is going to be dependent upon a change of the law.

Senator **Ford**. Right. Now probably you want this to go back to your legal counsel, and so if you're not in the posture or do not want to answer the question today, I will accept it in writing promptly.

The company that was authorized to proceed by the Federal Government has material on site, has ordered equipment, and is prepared to mobilize construction crews in short order. It is being paid roughly $200,000 a month for just sitting there. Have you considered the question of contract liability and how much would it cost the Government to terminate this contract under these circumstances?

Secretary **Hodel**. I have not been informed of that. I am confident I'll find when I ask that there will be some estimate as to what the termination costs would be, and I'd be happy to supply that for the record.

[The information follows:]

We have considered the question of contract liability in issuing the stop order to halt all present work on the Cumberland Gap Tunnel project. The contract for phase I of the project was awarded to Crosstown Contractors on November 20, 1984 for $5.5 million, and work started at the site on December 6, 1984. Assuming the contract is terminated by March 31, 1985, the costs and damages incurred by the contractor will cost the Federal Government an estimated $2.0 million. We view this cost as a reasonable alternative to spending the full amount required to complete the project.

Senator **Ford**. Then the termination costs would be one thing, and I guess would that include the contract liability?

Secretary **Hodel**. Any proper evaluation of contract termination has to include not just the contract termination costs but any potential liability, which maybe has to be put in terms of a contingent liability, but nonetheless, potential damages by the contractor.

## OFFICE OF SURFACE MINING

Senator **Ford**. All right. Mr. Secretary, I have surface mining questions. I want to ask you just a couple of those, if I may. I don't want to keep you all morning. Let me do this then.

The chairman says that the Republicans have a budget conference this morning. I hope they can get together and get one. What I will do then——

The **Chairman**. With the appropriate help.

Senator **Ford**. Well, we'll do some things today if we have the appropriate help. All we need's four, and 47 and four make 51. [Laughter.]

That's all we need, just four.

The **Chairman**. I assume the Democrats have had their conference.

Senator **Ford**. We've had it for some time. If we could get together, we'd be all right, just like you all, I guess.

But, Mr. Secretary, I'll submit these questions to you in writing, then, and I will drop off.

### SUPPLEMENTAL

One thing bothers me just a little bit. You referred, I think, to Senator Evans, or it may have been early on with one of the other Senators—Warner—about a supplement. There is no indication of a supplemental in your statement. From all I get is that OMB is not about to play along with any kind of supplemental request, and so if OMB's opposed to it, you'll never get a supplemental to us.

So to tell us that you're going to come with a supplemental almost has a hollow ring to it.

Secretary **Hodel**. Senator, I appreciate that. The context was with regard to the abandoned mine land fund, and we truly believe there is adequate money budgeted there, based on our experience over the last several years. I don't think there's a significant risk we would have to have a supplemental, but I think I have to be prepared to do battle with whomever I have to do battle with and come with such a supplemental if I'm going to support this kind of a budget level.

I think we should not over-budget for AML, but in order not to be able to do that, if we run short I have to be able to come forward with a supplemental or I can't have credibility with the committee.

Senator **Ford**. I find the attitude that a tax collected from the citizenry for a specific operation, whether it's ADEP, your airport funds, whether it's highway trust funds, or whatever, that those funds are no longer to be used because it helps reduce the deficit figure, well, the airports are deteriorating, the roads need to be built, and all that money is laying there and there may be a return on it.

And so I am hopeful about the AML funds, the tax has been paid. Why not go ahead and not only repair the land but employ some of the people? I would be hopeful we'd do that.

Mr. Chairman, I thank you, and I thank you, Mr. Secretary. I appreciate your attitude of wanting to work with us.

Secretary **Hodel**. Thank you, Senator.

The **Chairman**. Thank you, Senator Ford.

Mr. Secretary, I have a number of questions, most of which I will submit for responses in writing. There are a couple of areas that I want to get into now; one is just a parenthetical comment.

### HIGHWAY TRUST FUND

I don't think you created this attempt to raid the highway trust fund by canceling Cumberland Gap. I think OMB's done some very innovative budgeting throughout this budget, in which things just exactly like that are happening. I have expressed my concern with it because every one of us up here in this stringent budget year is given budget targets to meet in each of the areas of our responsibility.

And there are a number of areas in this budget submitted to us, in the areas of your responsibility, which are really smoke and mirrors. And this is one of them. To suggest that we're going to take money that was appropriated from the highway trust fund and use it to satisfy current year obligations in nonhighway areas is preposterous, and it isn't going to get anywhere.

But it does then put this committee, and this area of the budget, under a $38 million additional pressure to reduce expenditures, which I believe is all it was intended to do. I don't think you really thought it was going to happen, that the Congress is going to say hey, that's all right. We appropriated money out of the highway trust fund, now go pay for fire suppression costs with it.

You might as well have put one in to rescind some of the money for Social Security payments and use it for MX missiles. It has the same reality or unreality. I don't hold you responsible for that. I think your friend, our friend, Mr. Stockman, and his crew came up with some of those innovative methods for creating downward pressures on spending. And I salute him for his resourcefulness, but a little less for the honesty of the proposal.

### GRAZING FEE STUDY

One of the areas that bothers us, and you have had some questions on, is the grazing fee study and I will submit several questions in that regard. But this one area in the budget bothers me because, while the study is being completed, and I think has been completed, it has not yet been submitted to us in spite of our requests. I hope that it can be submitted in the near future. Am I correct in that?

Secretary Hodel. It should be submitted within a fairly short time, within a couple of weeks, without a specific recommendation. It will be the basic report and six alternatives, including a "current levels" alternative for review, but not a recommendation at this time, for the reason, Mr. Chairman, I must say, that when I found out that it was going to take us quite a bit longer to get the report out if we waited to develop a recommendation within the administration, I said let's get the report out with the alternatives so that people at least can comment upon that.

The Chairman. There is within the budget submission an $11 million increase assumed.

Secretary Hodel. Yes.

The Chairman. Is that the administration's position, that there will be an $11 million increase?

Secretary Hodel. Let explain, I noticed the same thing in preparation for this hearing, and I raised the same question. The answer I have obtained is that is a budget figure based on an assumption, which is that there is some fair market value that over a period of years would be reached. This would be a step toward a fair market value level, raising $11 million.

It is, I would call it, a "plug" figure for budget purposes because it does not represent decision taken by the administration as to a specific fee level.

The Chairman. And if, as a matter of fact, the administration doesn't have that position and the Congress doesn't take that position, then there's another $11 million overstatement of revenues?

Secretary Hodel. It's like the last item you just talked about.

The Chairman. That's what I thought you would say, as indeed it is.

### FOREST SERVICE/BLM LAND EXCHANGE

I'm a little puzzled about the language with respect to the expenses necessary to implement the Forest Service/Bureau of Land Management jurisdictional boundary change. You have indicated that the expenses to the Bureau of Land Management will be on the order of $35 million.

Secretary HODEL. Mr. Chairman, what I said was that over the long term we would anticipate annual savings of about $30 million, but we do not believe that would occur in the beginning from this proposal. And the 1986 budget shows an anticipated increase of $1.8 million only.

The CHAIRMAN. That's in revenues, or in expenses?

Secretary HODEL. This would be savings in administrative costs.

The CHAIRMAN. Well, according to our staff to staff discussions the figure has been identified of $35 million initial expenses to the BLM. I note that the Forest Service in their budget submission has identified costs to the Forest Service of the exchange of $64,185,000. My understanding is that the majority of that additional expense is associated with the O&C lands. I think some $15 million of it is associated with the other exchange expenses.

Secretary HODEL. I'm told that is correct.

The CHAIRMAN. If you do not have it broken out separately at this time, would you provide for us your estimate of the expenses of accomplishing the exchange of management and hopefully, if you can make that a no-year estimate because there would be a lot of speculation as to when the expense might occur. It might occur in 1 or 2 or perhaps 3 fiscal years.

Secretary HODEL. Mr. Chairman, I assume when you say that, you're indicating that you would like to see, to the best of our ability, an estimate of what it will cost to make the change-over if we were to do the whole thing, as well as any expected savings, and then we can net that out?

### FOREST SERVICE/BLM LAND EXCHANGE

The CHAIRMAN. Yes.

Secretary HODEL. So that we give you both the costs and the benefits and what we think the net is either way in the year of the changeover, and over the years. It may be that it will take more than 1 year to change over, and so it's really a multiyear estimate.

The CHAIRMAN. Yes, sir. If you would do that.

Secretary HODEL. You would like to know what does the interchange cost.

The CHAIRMAN. Yes. And if you can break it out separately, break out the O&C lands question separately.

Secretary HODEL. All right. Mr. Chairman, we will do the best we can on that. If we have a problem, we will notify you as to what the problem is as well.

The CHAIRMAN. I thank you.

[The information follows:]

### BLM-FOREST SERVICE INTERCHANGE

The total implementation cost of the BLM-Forest Service Interchange proposal is estimated to be in the range of $35-$45 million. Implementation would be phased in over the period FY 1986 through FY 1988. Full annual savings will be realized only after implementation is complete. Assuming that the realigned organization is largely in place by the beginning of FY 1989, savings for FY 1989 and beyond are estimated to be within a range of $25-$35 million annually. Both the cost and savings estimates are based on 1985 figures.

We will not have a proposed breakout of costs and savings by appropriation (including the Oregon and California Grant Lands account), fiscal year or agency (BLM, FS) until field implementation plans are approved in June 1985. We would be pleased to provide this type of information to the Committee when it becomes available.

## OSM–CERTAIN LEGAL SERVICES

The CHAIRMAN. The fiscal year 1986 budget for the Office of Surface Mining proposes an increase of $1.4 million, plus 31 full-time employees, for what is described as "certain legal services now supported by the Office of the Solicitor." Could you provide the detail as to what those legal services are?

Secretary HODEL. Yes, we will. Shall I do that for the record, Mr. Chairman?

[The information follows:]

### LEGAL SERVICES FUNDED BY OSM

The legal services funded by OSM in fiscal year 1986 include performing short-term caseloads generated by the Federal assumption of the Tennessee and Oklahoma regulatory programs and the agency's assessment and collections efforts. Inclusion of these services in OSM's budget will enable better coordination of legal services concerned with technical issues in the administration of OSM's responsibilities, and is more administratively efficient than budgeting these services in the Office of the Solicitor's budget.

The Solicitor's 1986 base budget was reduced by approximately $2.2 million as part of the ten percent reduction in the Department's headquarters and administrative expenses. Included in this reduction was the shifting of $1.4 million to OSM in order to achieve closer coordination among OSM staff and legal staff.

The CHAIRMAN. Mr. Secretary, I guess it would be fair to ask at this time why must OSM assume those responsibilities?

Secretary HODEL. It is not a requirement that OSM assume those responsibilities. Those responsibilities need to be carried out, and we are proposing, at the current time, to do that through the Office of Surface Mining because the lawyers who otherwise would be in the Solicitor's Office working full-time for OSM we felt could equally well be doing that work out of the Office of Surface Mining.

The CHAIRMAN. Well, Mr. Secretary, it seems to me that two things occur to me—maybe I'm wrong on both. Last year the proposal was made to do the same thing with respect to BIA, and the Congress specifically said no; The reason we wanted to do that was so that the lawyers did not become clients of the agency.

I think the same thing might be true here. We will look at it with the same kind of skepticism as to whether or not it can be done better by a separate legal service in OSM, or whether it can be done better by leaving it in the Solicitor's Office.

The second one, which is a deep-seated paranoia on my part, I guess, is this an effort that is being made to increase the overhead on collections so that you can decrease the amount of distribution to the States? Is it associated with the suggestion that it be net revenues rather than gross revenues?

Secretary **Hodel**. I do not think it is. In none of the briefings have I gotten any indication of that. If I may say it, I think it may, in fact, be related to our concern that it may be easier for us in the budget process to obtain the funding for the lawyers as a direct part of the enforcement activity than it is in the Solicitor's office.

We are under enormous pressure, administratively, in the budget to reduce the number of dollars spent on administrative overhead type activities, and our Solicitor's office falls into that category, which puts great downward pressure on us when we have these actually increasing responsibilities imposed upon us in enforcement.

When they are part of the Solicitor's office, the effect is they squeeze out other administrative requirements. It is a very difficult administrative management situation. I think we're trying to relieve the pressure on ourselves by getting it over into OSM.

### RECEIPTS

The **Chairman**. Mr. Secretary, let me just follow on on what the Senator from Wyoming mentioned a moment ago with respect to the distribution of net revenues. I'd like to take just a moment this morning to express my concern, whether it's minerals or timber receipts.

The administration's proposal to begin distributing net receipts, allowing the deduction of collection costs, on its surface looks like a reasonable proposal, because, on its surface it looks like some people who never look below the surface have embraced it. I have noticed some editorial comment around the country that 90 "oh, gee, this is reasonable." Why should the States get that money free, in effect?

You would know, as many others would not know, that there's a long history behind all of this, and it was not easy for the Congress to reverse what happened over a period of almost 75 years from the founding of the Forest Service, when the original 25 percent receipts was promised to the States in which the Forest Reserves were created. Over the years the administration kept loading cost, on top of cost, on top of cost, to the point where there was nothing left to distribute.

The State and local governments that were the recipient of the fees had absolutely nothing to say about the costs associated with the collection of the fees, and as a result it was easy for the government, who had everything to say about both, to add more costs to administration and collection and eventually there was nothing left.

I think I see the same thing happening right now. Just open the door a little, and we'll be very reasonable about what we put in. And next year we'll put in a little more, and the next year a little more, and the next year a little more, and in a few years we'll be back where we were before, with nothing left to distribute, because the Federal government has managed to absorb it all.

This is one Senator who is reluctant to open that door even a crack, because that has been abused by the Federal Government in the past, in my opinion, and I don't want to tempt the Government to abuse it again.

## TRUST TERRITORY OF THE PACIFIC ISLANDS

One final comment, Mr. Secretary, and there are some questions which I will submit that deal with that knotty question of the Trust Territory of the Pacific Islands. In this instance I find the Department of the Interior not at fault, but you are a part of the same administration as the Department of State, although seldom acts like it.

We were assured in questioning a year ago by the Department of State, by Ambassador Zeder, in questioning which I conducted, that we would have full consultation. I asked Ambassador Zeder this question:

> What consultation do you plan to have with members of this Committee in agreeing to an effective date implementing the Compact and taking into account any procedures with respect to the United Nations?
>
> Mr. **Zeder**. Mr. Chairman, we look forward to full consultation with you on all these matters.
>
> The **Chairman**. Prior to their event?
>
> Mr. **Zeder**. Yes, sir.

The February 15, 1985, Marianas newspaper includes a story on a meeting which a delegation from the Marianas had with Ambassador Harvey Feldman, who is the U.S. Ambassador to the Trusteeship Council at the United Nations, in which he urged the Marianas to get together with the Marshalls and FSM to petition the United Nation for termination of the trusteeship for them, leaving Palav until it had resolved its status. Now I don't believe that a subscription to the Marianas paper is full and prior consultation.

On February 25, 1985, Deputy Assistant Secretary of State Brown, in testimony before the House Interior Committee, indicated that the administration was contemplating such a position. His phrase was "the train is about to leave." I don't regard an administration spokesman's statement before a House Committee to be full and prior consultation with this committee.

I mention that because I know you're not responsible for that, but I dare cherish the hope and at least want to undertake the effort of mobilizing you to tell the State Department that they are a part of this administration, and I wish you luck when you say that.

Secretary **Hodel**. Thank you.

## TRUST TERRITORY OF THE PACIFIC ISLANDS

The **Chairman**. I don't know how to get through to them. I have thought maybe some one of us from the Congress should become delegates to the United Nations and maybe by getting to the United Nations, in that rarified atmosphere in Manhattan, we could have a dialog with somebody from the State Department who is in a position to do what he says he will do.

There is another facet to that. We specifically wrote into law last year that the State Department was not to station personnel. We were not to get ambassadors to those units of government until after the Compacts were established and the whole issue of post-Compact administration is involved. So what did they do? They assured us they wouldn't do that. Now they have representatives in each area, because you, Mr. Secretary, are not competent to carry out the consultation and contact with those entities at this time.

The State Department's running around you. They're thumbing their nose not only at us but at you. I resent it. I assume that you don't support it. I mention it now only because there's got to be some way to get through to them that the Congress is a player in this, that we expect you to be responsible in this matter, and they're not permitting you to be responsive to us in the way that we have required of you.

I regret it, but I don't know how to get through to them and also get accomplished what I think is necessary to be done without putting some pressure on you. You're not the source of the problem. Your Department is not the source of the problem. But we have to hold you responsible. So I just want you to know that while you thought things were hectic over in the Department of Energy, they're slightly less pointed in the Department which you now head.

Secretary HODEL. Mr. Chairman, I appreciate your comments. Assistant Secretary Montoya is here. I know you don't have the time today. He could catalog for you his efforts to work with Ambassador Zeder that have not always been blessed with success, and I will seek an early copy of the transcript of this proceeding and with that seek to communicate more effectively than we have so far been able to do with the Department of State.

The CHAIRMAN. I know that Secretary Montoya has tried. I know that he has sometimes been frustrated. I'll not put words in his mouth, but we also know. You and I know, and so does Secretary Montoya, and so do, I hope, some people over in State that some of the efforts by the Department of Defense in the past have compounded our difficulties out there. But if I have to mobilize the Department of Defense to fight the State Department, I'll do it.

That's dangerous to national goals in that area, but what's happening now is unconscionable. When an agency of the Federal Government undertakes to do what they want to do because they want to do it, regardless of commitments made and positions taken between the legislative branch and the administrative branch, then it seems to me that somebody's grown too big for their britches and if you've got to shoot those britches off, you better do it.

Somehow, somehow, we have to get enough interest and enough attention in the Department of State so they'll focus on this in terms of not what their will is but what collective judgment says the procedure ought to be. I know what they want. They don't have to tell me that. They have repeatedly.

### TRUST TERRITORY OF THE PACIFIC ISLANDS

Mr. Secretary, I am almost apologetic for having to bring this up to you because you're not the problem. But I'm going to do whatever I can to corral the State Department.

Secretary HODEL. Mr. Chairman, I hear you. I understand. I recognize also that the Department of the Interior represents potential leverage to bring about what you're seeking, and we will do what we can to try to alleviate this problem.

The CHAIRMAN. I thank you, Mr. Secretary.

Senator Wallop.

### WALLOP-BREAUX

Senator **Wallop.** Mr. Chairman, I don't have a question. I have some that I will submit, one of which would be about Wallop-Breaux, but I did not want to let the record go uncorrected. When I asked you if you would assist me in getting a response on the technical corrections things, the letter requesting that only went down yesterday.

The request verbally has been made for about 10 days. But you have been good about responding to this committee and I didn't mean to suggest by any stretch of the imagination that you were not, and I phrased the question badly.

Secretary **Hodel.** I appreciate that, Senator. I feel very strongly that we need to be responsive to the committee and to members of the committee, and we try hard to do that. We are not uniformly successful, for which I am always regretful, but we do try to communicate. Even if the news isn't good, I figure it's better to be timely or as close to that as possible than to be both bad news and late.

Senator **Wallop.** Well, in this instance you would have had to have been faster than a speedy bullet.

Secretary **Hodel.** Thank you.

Senator **Wallop.** Thank you, Mr. Chairman.

The **Chairman.** Senator Hecht was here at the opening of the meeting today but was called away to a meeting of the Intelligence Committee. He had a very brief opening statement, which will be made a part of the record at the beginning of this meeting today, and some questions for submittal to you in writing for response in writing.

The record will remain open for the submission of questions and their responses and the questions should be submitted by close of business tomorrow. Hopefully we can have responses to those questions in a very timely manner so we can make our budget submission.

Secretary **Hodel.** Thank you, Mr. Chairman.

The **Chairman.** There being no further business to come before the committee this morning, the committee is adjourned.

[Whereupon, at 10:46 a.m., the hearing was recessed, to reconvene Friday, March 1, 1985.]

# APPENDIX I

## RESPONSES FROM SECRETARY HODEL TO ADDITIONAL COMMITTEE QUESTIONS

Answers to Questions Submitted to

The Honorable Donald Paul Hodel
Secretary
Department of the Interior

From the

Committee on Energy and Natural Resources

February 27, 1985

Questions 1 - 71, Submitted by the Majority
Questions 72 - 83, Submitted by Senator Weicker
Questions 84 - 88, Submitted by Senator Wallop
Questions 89 - 90, Submitted by Senator Warner
Question 91, Submitted by Senator Nickles
Questions 92 - 95, Submitted by Senator Hecht
Questions 96 - 105 Submitted by Senator Evans
Questions 106 - 169, Submitted by Senator Johnston
Questions 170 - 186, Submitted by Senator Ford
Questions 187 - 195, Submitted by Senator Bumpers
Quesitons 196 - 203, Submitted by Senator Metzenbaum
Questions 204 - 214, Submitted by Senator Bingaman

## QUESTIONS FOR SECRETARY OF THE INTERIOR HODEL

### FY 1986 Legislative Initiatives

1. Would you provide for the record a list of legislative initiatives accompanying the President's fiscal year 1986 budget? Would you include:

   (A) A statement of purpose;

   (B) Proposed language (if available at this time, but, if not, an indication of when it will be available);

   (C) An explanation of the language; and

   (D) Whether, in your judgment, such legislation would be forwarded to the Energy and Natural Resources Committee or to the Appropriations Committee?

Answer:

A bureau-by-bureau list of legislative initiatives accompanying the President's fiscal year 1986 budget is attached. Proposed language and an explanation are included where available or, if unavailable, an indication of when such language will be available is included. Initiatives are listed in two categories. The first category will be transmitted to the President of the Senate and we anticipate that it will be referred to the Energy and Natural Resources Committee. The second category has been provided to both the Energy and Natural Resources Committee and the Appropriations Committee.

## LEGISLATION REQUIRED BY THE PRESIDENT'S 1986 BUDGET

BUREAU: National Park Service

1. **Legislation to be submitted by the President:**

   - Legislation to authorize appropriations for operating and maintaining the non-performing arts functions of the John F. Kennedy Center for the Performing Arts.
   - Legislation to repeal Section 9 of the Land and Water Conservation Act of 1965, as amended, to remove the $30 million contract authority for land acquisition.
   - Legislation to repeal Section 402 of the National Parks and Recreation Act, 1978 Amendments, to remove the prohibition on charging a user fee for transportation services and facilities at Denali National Park.
   - Legislation to increase revenues from recreation fee collection and dedicate those amounts back to the programs of the National Park Service.

No language for these proposals is available at this time, but we expect to forward draft legislation within the next few weeks.

2. **Legislative Proposals included in the Proposed Appropriations Language:**

| Topic | Justification page #'s |
|---|---|
| Repeal prohibition of user fees at Denali National Park, authority to establish, continue, and revise entry and recreation user fees in the park system; repeal requirement that recreation fees be deposited in the LWCF | NPS-11, 12, 13 |
| Appropriations for operating and maintaining the nonperforming arts functions of the John F. Kennedy Center for the Performing Arts | NPS-212, 213 |
| Repeal Section 9 of the LWCF Act, as amended, to remove the $30 million contract authority for land acquisition | NPS-226, 227 |
| Repeal authorization in the 1985 appropriations act that established the National Capital Region Arts and Cultural Affairs grant program | NPS-309, 310 |
| Supplemental language to transfer Construction (Trust Fund) funds to NPS Land Acquisition account | NPS-314, 315, 316 |

## DEPARTMENT OF THE INTERIOR
## NATIONAL PARK SERVICE

### OPERATION OF THE NATIONAL PARK SYSTEM

For expenses necessary for the management, operation, and maintenance of areas and facilities administered by the National Park Service (including special road maintenance service to trucking permittees on a reimbursable basis), and for the general administration of the National Park Service, including not to exceed $418,000 for the Roosevelt Campobello International Park Commission, and $500,000 for the Volunteers-in-the-Park program, [not less than $3,400,000 for high priority projects whithin the scope of the approved budget which shall be carried out by Youth Conservation Corps as if authorized by the Act of August 13, 1970, as amended by Public Law 93-408, and $350,000 for the National Capital Children's Museum and $350,000 for the Arena Stage as if authorized by the Historic Sites Act of 1935 (16 U.S.C. 462(e)), $625,365,000] $585,685,000 without regard to the Act of August 24, 1912, as amended (16 U.S.C. 451): Provided, That the Park Service shall not enter into future concessionaire contracts, including renewals, that do not include a termination for cause clause that provides for possible extinguishment of possessory interests excluding depreciated book value of concessionaire investments without compensation: Provided further, That appropriations for maintenance and improvement of roads within the boundary of Indiana Dunes National Lakeshore shall be available for such purposes without regard to whether title to such road rights-of-way is in the United States: Provided further, That [$85,000 shall be available to assist the town of Harpers Ferry, West Virginia, for police force use.] section 402 of the National Parks and Recreation Act, 1978 Amendments, Public Law 96-87 (93 Stat. 664, 666), which contains a prohibition on user fees, for transportation services and facilities in Denali National Park, Alaska, is repealed: Provided further, That notwithstanding any other provision of law, the National Park Service shall hereafter establish or continue reasonable entry and special recreation use fees for all units of the National Park System administered by the Department of the Interior, where practical, and that such fees may from time to time be revised: Provided further, That the provisions of Public Law 96-514 which provide that revenues from Federal agency recreation fee collections shall be paid into the Land and Water Conservation Fund (16 U.S.C. 460L-5a) are repealed. (5 U.S.C. 5901-03; 16 U.S.C. 1, 1a-5, 1b, 1c, 3, 7a-e, 8b, 8d, 17j-2; 17k-1, 17n, 18f, 18g, 47-2, 431-433, 461-467, 590a, 590f, 594, 1281c, 4601-4601-3, 469c, 470, 2501; 43 U.S.C. 620 (g); Act of July 7, 1964 (78 Stat. 299); Act of September 3, 1964 (78 Stat. 890); Public Law 96-344; Department of the Interior and Related Agencies Appropriations Act, 1985, as included in Public Law 98-473.)

## Justification of Proposed Language Changes

## Operation of the National Park System

1. Deletion: "not less than $3,400,000 for high priority projects within the scope of the approved budget which shall be carried out by the Youth Conservation Corps as if authorized by the Act of August 13, 1970, as amended by Public Law 93-408..."

   The Service proposes to delete this language consistent with the Administration's position to terminate the Youth Conservation Corps Program. Youth Conservation employees cannot substitute for maintenance professionals in the parks. They are only qualified to complete unskilled construction work which is often not a high priority of the Service.

2. Deletion: "and $350,000 for the National Capital Children's Museum and $350,000 for the Arena Stage as if authorized by the Historic Sites Act of 1935 (16 U.S.C. 462(e))..."

   The Service does not plan to request funds for the National Capital Children's Museum or for the Arena Stage in fiscal 1986. Therefore, the language is no longer necessary.

3. Deletion: "$85,000 shall be available to assist the town of Harpers Ferry, West Virginia, for police force use."

   Funds to support the town of Harpers Ferry police force are not being requested for fiscal 1986. Therefore, this language is no longer necessary.

4. Additions: "Provided further, That section 402 of the National Parks and Recreation Act, 1978 Amendments, Public Law 96-87 (93 Stat. 664, 666), which contains a prohibition on user fees, for transportation services and facilities in Denali National Park and Preserve, Alaska, is repealed."

   Section 402 of the October 12, 1979, Act (93 Stat. 664, 666) contained a prohibition on charging a user fee for transportation services and facilities at Mount McKinley National Park, which has been renamed Denali National Park by the Alaska National Interest Lands Conservation Act. The removal of the prohibition on user fees will permit the National Park Service to implement a user fee in order to partially recover the cost of providing the service, thereby, shifting the cost from the general taxpayer to those who benefit from the service.

   "Provided further, that notwithstanding any other provision of law, the National Park Service shall hereafter establish or continue reasonable entry and special recreation use fees for all units of the National Park System administered by the Department of the Interior, where practical, and that such fee may from time-to-time be revised."

   The above language will repeal the current freeze on entrance fees imposed under section 402 of Public Law 96-87 (93 Stat. 664, 666) and permit the Service to establish reasonable entrance fees for any unit of the National Park System where the collection of such a fee is both cost-effective and beneficial to the general public.

"Provided further, That the provisions of Public Law 96-514 which provide that revenues from Federal agency recreation fee collections shall be paid into the Land and Water Conservation Fund are repealed."

This provision would provide for the deposit of all recreation fee revenues in a special Treasury account. Moreover, the Service proposes to request appropriations from this account in fiscal 1987 to establish a viable preventive maintenance program to follow completion of the Park Restoration and Improvement Program.

## Appropriation Language Citations

Appropriation: John F. Kennedy Center for the Performing Arts

Appropriation language and citations:

1. For expenses necessary for operating and maintaining the nonperforming arts functions of the John F. Kennedy Center for the Performing Arts.

Not authorized

P.L. 92-313 (86 Stat. 216) amends Sec. 10 Section 6 of the John F. Kennedy Center Act, as amended (72 Stat. 1968) by adding at the end thereof the following new subsection: (e) The Secretary of the Interior, acting through the National Park Service, shall provide maintenance, security, information, interpretation, janitorial and all other services necessary to the nonperforming arts functions of the John F. Kennedy Center for the Performing Arts.

P.L. 98-146 extended the appropriation authorization through the fiscal year ending September 30, 1984.

Legislation is required for the John F. Kennedy Center for the Performing Arts for fiscal 1985.

## JOHN F. KENNEDY CENTER FOR THE PERFORMING ARTS

For expenses necessary for operating and maintaining the nonperforming arts functions of the John F. Kennedy Center for the Performing Arts, [$4,621,000] $4,529,000. (20 U.S.C. 76l (e)); Department of the Interior and Related Agencies, Appropriations Act, 1985, as included in Public Law 98-473.)

## Justification of Proposed Language Changes

### Land Acquisition

1. Deletion: "and State Assistance" in the appropriation head.

   This language is no longer necessary since no funds are requested for the State Assistance Program in fiscal 1986.

2. Deletion: ", of which $75,000,000 is for the State Assistance Program including $1,681,000 to administer the program:"

   This language is not necessary because funds are not requested in 1986 for the State Assistance Program.

3. Deletion: "Provided, That State administrative expenses associated with the State grant portion of the State Assistance program shall not exceed 15 percent: Provided further, That none of the State Assistance funds may be used as a contingency fund"

   This language is not necessary because funds are not requested in 1986 for the State Assistance Program.

4. Addition: "Provided further, That section 9 of the Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 460l-10a), is repealed"

   This proposed change in appropriation language removes the $30 million contract authority for land acquisition. This authority has not been used in recent years. Significant increases in the authorized level of the Fund and the use of reprogramming procedures have lessened the need for the use of this authority. The U.S. Code citation shown above corrects the citation shown in the President's budget.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

## LAND ACQUISITION [AND STATE ASSISTANCE]

For expenses necessary to carry out the provisions of the Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 4601-4-11), including administrative expenses, and for acquisition of land or waters, or interest therein, in accordance with statutory authority applicable to the National Park Service, [$150,220,000] $11,275,000, to be derived from the Land and Water Conservation Fund, to remain available until expended [, of which $75,000,000 is for the State Assistance program including $1,681,000 to administer the program: Provided, That State administrative expenses associated with the State grant portion of the State Assistance program shall not exceed 15 percent: Provided further, That none of the State Assistance funds may be used as a contingency fund]: Provided [further], That of the amounts previously appropriated to the Secretary's contingency fund for grants to States, [$318,000] $852,000 shall be available in [1985] 1986 for administrative expenses of the State grant program: Provided further, That section 9 of the Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 4601-10a), is repealed. (Department of the Interior and Related Agencies Appropriations Act, 1985, as included in Public Law 98-473.)

NOTE: The U.S. Code citation shown in the last provision above corrects the citation shown in the President's budget.

## Justification of Proposed Language Changes

## National Capital Region Arts and Cultural Affairs

1. Deletion: The entire language under the above heading.

   Funds for the above item are not requested in fiscal 1986, and the language establishing the program has served its purpose. Therefore, this language is no longer necessary.

[NATIONAL CAPITAL REGION ARTS AND CULTURAL AFFAIRS]

[For the fiscal year ending September 30, 1986, for a program to support artistic and cultural programs in the National Capital Region, $5,000,000, to remain available until expended: Provided, That there is hereby established under the direction of the National Park Service a program to support and enhance artistic and cultural activities in the National Capital Region. Eligibility for grants shall be limited to organizations of demonstrated national significance which meet at least two of the additional following criteria:

(1) an annual operating budget in excess of $1,000,000;
(2) an annual audience or visitation of at least 200,000 people;
(3) a paid staff of at least one hundred persons; or
(4) eligibility under the Historic Sites Act of 1935 (16 U.S.C. 462(e)).

Public or private colleges and universities are not eligible for grants under this program.]

[Grants awarded under this section may be used to support general operations and maintenance, security, or special projects. No organization may receive a grant in excess of $500,000 in a single year.]

[The Director of the National Park Service shall establish an application process, appoint a review panel of five qualified persons, at least a majority of whom reside in the National Capital Region, and develop other program guidelines and definitions as required.]

[The contractual amounts required for the support of Ford's Theater and Wolf Trap Farm Park for the Performing Arts shall be available within the amount herein provided without regard to any other provisions of this section.] (Department of the Interior and Related Agencies Appropriations Act, 1985, as included in Public Law 98-473.)

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

CONSTRUCTION (TRUST FUND)

It is proposed that $25,066,000 of funds appropriated for Cumberland Gap Tunnel construction be used instead to restore funds to other accounts from which funds were previously transferred to the Bureau of Land Management for fire protection expenses. This transfer will be effected by appropriation language for each of those accounts allowing transfer of funds by reimbursement, including $3,216,000 in "Land Acquisition and State Assistance, National Park Service."

## DEPARTMENT OF THE INTERIOR
## NATIONAL PARK SERVICE

### LAND ACQUISITION AND STATE ASSISTANCE

(Supplemental now Requested, Existing Legislation)

For an additional amount for "Land acquisition and state assistance", not to exceed $3,216,000 to be derived by transfer from "Construction (Trust Fund)", National Park Service.

## LEGISLATION REQUIRED BY THE PRESIDENT'S 1986 BUDGET

BUREAU: Bureau of Land Management

1. **Legislation to be submitted by the President:**

   - Authority for BLM/Forest Service Interchange. The interchange will involve the two agencies assisting each other in the transfer of lands, mineral resources, and related authorities between the agencies to produce more efficient management of our joint Federal lands and resources. A draft bill is expected to be submitted in early summer, we anticipate such a draft would be considered in the Senate Energy and Natural Resources Committee.

2. **Legislative Proposals included in the Appropriations Language:**

| | Topic | Justification Page #'s |
|---|---|---|
| o | Proposed deletion of 1985 Appropriation language regarding excess profits from an assignment or other conveyance of a grazing permit or lease. | BLM-280 and 281 |
| o | Proposed clarification of the Secretary's authority to collect the actual cost of processing major rights-of-way applications. | BLM-312, 312 and 75 |

3. **Other**

| | | |
|---|---|---|
| o | Workload projections for the Bureau's wild horse and burro program are based in part on the assumption that legislation similar to S. 457 introduced in the 98th Congress will be enacted, granting authority for the sale of excess animals for which there is no adoption demand. | BLM 98-99 |

## Appropriation Language Sheet

## Range Improvements

For rehabilitation, protection, and acquisition of lands and interests therein, and improvement of Federal rangelands pursuant to section 401 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701), nothwithstanding any othe; Act, sums equal to fifty per centum of all moneys received during the prior fiscal year under sections 3 and 15 of the Taylor Grazing Act (43 U.S.C. 315, et seq.), but not less than $10,000,000 (43 U.S.C. 1901), and the amount designated for range improvements from grazing fees and mineral leasing receipts from Bankhead-Jones lands transferred to the Department of the Interior pursuant to law, to remain available until expended: Provided, That not to exceed $600,000 shall be available for administrative expenses[: Provided further, That the dollar equivalent of value, in excess of the grazing fee established under law and paid to the United States Government, received by any permittee or lessee as compensation for an assignment or other conveyance of a grazing permit or lease, or any grazing privileges or rights thereunder, and in excess of the installation and maintenance cost of grazing improvements provided for by the permittee in the allotment management plan or amendments or otherwise approved by the Bureau of Land Management, shall be paid to the Bureau of Land Management and disposed of as provided for by section 401(b) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701): Provided further, That if the dollar value prescribed above is not paid to the Bureau of Land Management, the grazing permit or lease shall be cancelled].

(7 U.S.C. 1010; 30 U.S.C. 355; 43 U.S.C. 1751, and 1901; Department of the Interior and Related Agencies Appropriations Act, 1985, as included in Public Law 98-473.)

## Justification of Proposed Language Changes

## Range Improvements

1. Deletion: ":Provided further, That the dollar equivalent of value, in excess of the grazing fee established under law and paid to the United States Government, received by any permittee or lessee as compensation for an assignment or other conveyance of a grazing permit or lease, or any grazing privileges or rights thereunder, and in excess of the installation and maintenance cost of grazing improvements provided for by the permittee in the allotment management plan or amendments or otherwise approved by the Bureau of Land Management, shall be paid to the Bureau of Land Management and disposed of as provided for by section 401(b) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701): Provided further, That if the dollar value prescribed above is not paid to the Bureau of Land Management, the grazing permit or lease shall be cancelled".

As written, the language potentially constrains legitimate transfers of grazing permits, such as sales and leases of base property. The condition which reads "for an assignment or other conveyance," arguably goes beyond the intent of the language, which was specifically aimed at illegal subleasing arrangements whereby the permittee profits directly through receipt of higher fees than paid to the United States. Although this problem could be solved by changing the language, we propose that the language be deleted in its entirety in the 1986 appropriations bill for the following reasons.

Regulations defining and controlling illegal subleasing of grazing permits are scheduled to be placed in effect in February 1985. These regulations will provide penalties against violators by requiring the payment to the U.S. of those profits made through illegal subleasing arrangements, as provided for in the appropriations language. However, the regulations also include penalties under other authorities which call for trespass action against unauthorized third parties, and cancellation or reduction of grazing privileges for permittees who engage in illegal subleasing. Therefore, deletion of the language would only affect the penalty calling for payment of illegal subleasing profits to the U.S. This provision will be extremely difficult and cumbersome to enforce since there has been no prior history to establish legal and administrative procedures through which these profits can be determined and recovered. The remaining penalties (i.e., trespass, cancellation, reduction) are well-established procedures and will have the effect of deterring both the permittee and any third party from entering into illegal subleasing arrangements.

## Appropriation Language Sheet

## Service Charges, Deposits, and Forfeitures

For administrative expenses and other costs related to processing application documents and other authorizations for use and disposal of public lands and resources, for monitoring construction, operation, and termination of facilities in conjunction with use authorizations, and for rehabilitation of damaged property, such amounts as may be collected under sections 209(b), 304(a), 304(b), 305(a) and 504(g) of the Act approved October 21, 1976 (43 U.S.C. 1701), and sections 101 and 203 of Public Law 93-153, to be immediately available until expended: Provided, That, pursuant to this Act and hereafter, and except with respect to those applications for which costs are recovered on the basis of a schedule of fees or charges fixed by regulation, the amounts collected under section 304 of the Act of October 21, 1976, and sections 101 and 203 of Public Law 93-153 and appropriated under this heading shall be sufficient to meet the actual cost, including direct and indirect costs, to the United States, as determined by the Secretary, of the application processing and other activities, including the full cost of preparation of environmental impact statements, required in connection with the application for which such charges are made: Provided further, That, pursuant to this Act and hereafter, and except with respect to those applications for which costs are recovered on the basis of a schedule of fees or charges fixed by regulation, no funds other than those appropriated under this heading, or otherwise available under the provisions of subsection 307(c), of the Act of October 21, 1976, may be used to meet the costs determined by the Secretary, in his discretion, to be reasonable under section 304(b) of said Act.

(43 U.S.C. 1719, 1734, 1735, and 1764; 30 U.S.C. 185; 87 Stat. 584; Department of the Interior and Related Agencies Appropriations Act, 1985, as included in Public Law 98-473.)

## Justification of Proposed Language Changes

### Appropriation: Service Charges, Deposits, and Forfeitures

1. Insert the following language: "Provided, That, pursuant to this act and hereafter, and except with respect to those applications for which costs are recovered on the basis of a schedule of fees or charges fixed by regulation, the amounts collected under Section 304 of the Act of October 21, 1976, and Sections 101 and 203 of Public Law 93-153 and appropriated under this heading shall be sufficient to meet the actual cost, including direct and indirect costs, to the United States, as determined by the Secretary, of the application processing and other activities, including the full cost of preparation of environmental impact statements, required in connection with the application for which such charges are made: Provided further, That, pursuant to this Act and hereafter, and except with respect to those applications for which costs are recovered on the basis of a schedule of fees or charges fixed by regulation, no funds other than those appropriated under this heading, or otherwise available under the provisions of subsection 307(c) of the Act of October 21, 1976, may be used to meet the costs determined by the Secretary, in his discretion, to be reasonable under Section 304(b) of said Act."

This new language provision in BLM's Service Charges, Deposits and Forfeitures appropriation responds to an Appeals Court ruling on consolidated appeals in Nevada Power Co., et al. v. U.S. (Tenth Circuit, June 16, 1983). The Tenth Circuit ruled that the Secretary of the Interior must consider all factors listed in section 304(b) of the Federal Land Policy and Management Act (FLPMA), 43 U.S. 1734(b), in determining whether costs charged to applicants for special benefits are reasonable.

The above language is being requested to clarify the congressional intent that the Secretary collect the full, actual cost of processing these large scale rights-of-way applications without regard to making individual case-by-case determinations on the other factors listed in section 304(b). Except for donated funds, only those funds collected from applicants and deposited in and appropriated from this account may be expended for the purpose of processing those applications. The language also provides that small applications, which are relatively inexpensive to process and which are subject to a fixed schedule of fees or service charges set by regulation, may be processed using these or other funds available to the BLM including the amount of the fixed fees collected, deposited in and appropriated from this account without regard to maintaining exact project-by-project accounting for each application.

Case processing work includes preparation of preliminary investigations which analyze alternate site possibilities, environmental assessments, appraisals, development of special permit stipulations, and issuance of rights-of-way grants. Monitoring of construction to ensure compliance with permit stipulations is also a workload of this program.

Additionally, work items such as review of other agencies' EIS's on rights-of-way, program management costs not chargeable to applicants, partial funding of BLM's lands and realty training program, corridor planning, and all pre-application work are covered by this program.

The amount of time for pre-application work varies from a few hours for small R/W's to many months for major R/W's. Pre-application work may include formal and informal meetings with prospective applicants; preparation of correspondence; site inspection (determined by the extent of the rights-of-way); review and coordination with planning and other specialties; and in general, ensuring in advance that the application will meet the requirements of both parties in order to expedite processing when the application is received.

(dollars in thousands)

| Decrease from 1986 Base | FY 1986 Base | FY 1986 Estimate | Difference |
|---|---|---|---|
| $ | 7,743 | 6,043 | -1,700 |
| (FTE) | (239) | (216) | (-23) |

Language changes are proposed in FY 1986 for the "Service Charges, Deposits, and Forfeitures" appropriation to clarify what costs constitute reasonable administrative and other costs in relation to what costs are to be reimbursed by the applicant. The new language should clear up the ambiguity of the standing legislation and give a measure of stability to the funding levels, which in the past have been erratic.

Regulations will also be published which will provide a fee schedule for reimbursement of minor or smaller types of R/W's applied for under FLPMA authority and will outline more precisely the effects of the reasonableness criteria stated in FLPMA. The appropriation language change and new regulations should be in place to begin FY 1986.

Implementation of these measures will permit the processing of rights-of-way cases to be funded more heavily through the "Service Charges, Deposits, and Forfeitures" appropriation. Approximately 2,500 cases will be funded partially by reimbursement from the applicant. The remainder are cases which are not cost reimbursable. Only a portion of processing costs for the FLPMA cases will be recoverable due to the reasonableness criteria in FLPMA. Approximately 60 percent of the service charges revenue received will be from minor projects (processing costs under $5,000) and 40 percent from major projects (processing costs over $5,000).

The impact of the new regulations on smaller operators will be minor. It is anticipated that, under the fee schedules contained in the proposed regulations, the fee for processing a small R/W will change from an average of $75 to an average of $200 for MLA cases and $300 for FLPMA cases. To our knowledge, few, if any, "small operators" fall under "actual cost" recovery procedures used for major R/W's.

Effective March 4, 1983, adoption fees for horses were set at $125 and the fee for burros at $75 per animal. These fees are deposited in the Bureau's "Service Charges, Deposits, and Forfeitures" Appropriation and are available for use by the Bureau to operate the wild horse and burro program.

At the end of FY 1984, over 2,500 animals were being maintained in BLM corrals and adoption centers, at daily feeding costs of about $2/day/animal. Emergency rulemaking was published in May 1984 that gives the BLM Director the authority to waive or adjust the current adoption fee for those animals not being sought for adoption under existing fees. This rule has the potential of reducing the number of unadoptable animals.

Legislation was introduced in the 98th Congress (S.457 and H.R. 1675) which, if it had been enacted, would have granted BLM authority to sell any excess animals for which there was no adoption demand. Present law provides only for the humane destruction of unadopted animals. Sale authority is desirable, and BLM supports the concept. It was assumed that sale proceeds would go into the "Service Charges" Appropriation just as adoption fees now do and would be available for BLM to use in the wild horse and burro management program. The FY 1986 Estimate is based on the assumption that legislation granting sale authority will be in place, and that operation at a funding level significantly lower than the base level will thus be possible.

The following table indicates program outputs possible with the base funding level and no sale authority. Removal levels are significantly reduced from FY 1985 because during FY 1986 the Bureau will need to feed and maintain 10,025 unadopted animals gathered in FY 1985 ($7.3 million).

| Workload Measure | FY 1984 Actual | FY 1985 Estimate | FY 1986 Base | Inc. (+) or Dec. (-) |
|---|---|---|---|---|
| Studies | 1 | --- | --- | --- |
| Herd management area plans implemented | 22 | 18 | 18 | --- |
| Monitoring (# of herd areas) | 82 | 97 | 97 | --- |
| Animals removed | 6,084 | 17,825 | 12,000 | -5,825 |
| Animals adopted | 5,491 | 9,500 | 7,750 | -1,750 |
| Animals destroyed | 400 | 800 | 600 | -200 |
| Animals maintained in corrals (EOY) | 2,500 | 10,025 | 13,675 | +3,650 |
| Animals sold | --- | --- | --- | --- |
| Compliance checks (adopters) | 454 | 400 | 400 | --- |
| Animals titled | 3,585 | 5,000 | 9,000 | +4,000 |

At the base FY 1986 funding level, BLM would remove 12,000 excess animals from the public lands. Of these, approximately 7,750 would be adopted and 400 destroyed as old, sick, or lame. The remaining animals (3,850) would be placed in long-term maintenance awaiting disposition. At the base rate of removal, appropriate management levels would be reached in approximately 11 years.

Decrease from 1986 Base

(dollars in thousands)

| | FY 1986 Base | FY 1986 Estimate | Difference |
|---|---|---|---|
| $ | 16,710 | 6,063 | -10,647 |
| (FTE-T) | (100) | (90) | (-10) |

A decrease of $10,647,000 is proposed in the FY 1986 Estimate. This decrease is based in part on the program efficiencies possible with sale authority for unadopted excess animals removed from the public lands.

A total of 14,025 animals would be available for disposition in FY 1986, of which 10,025 are carry-over from FY 1985 and 4,000 of which will be gathered in FY 1986. Of these, 525 would be destroyed as old, sick, or lame; 7,000 would be sold at auction; and 6,500 would be adopted (1,500 burros and 5,000 horses). All animals sold would be horses. No animals would be adopted at a reduced fee, because animals considered to be unadoptable would be sold.

Workload accomplishments at the FY 1986 Estimate would be as follows:

| Workload Measure | FY 1986 Base | FY 1986 Estimate | Inc. (+) or Dec. (-) |
|---|---|---|---|
| Studies | --- | --- | --- |
| Herd management area plans implemented | 18 | 18 | --- |
| Monitoring (# of herd areas) | 97 | 97 | --- |
| Animals removed | 12,000 | 4,000 | -8,000 |
| Animals adopted | 7,750 | 6,500* | -1,250 |
| Animals destroyed | 600 | 525 | -75 |
| Animals maintained in corrals (EOY) | 13,675 | --- | -13,675 |
| Animals sold | --- | 7,000* | +7,000 |
| Compliance checks | 400 | 400 | --- |
| Animals titled | 9,000 | 9,000 | --- |

The FY 1985 program also included $1,000,000 earmarked specifically for additional research on wild horse and burro issues, to be conducted by BLM in conjunction with the National Academy of Sciences. The necessary research work will be initiated in FY 1985; and, therefore, these funds will not be needed again in FY 1986. Consequently, a decrease of $1,000,000 can be obtained from the research program.

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* Includes excess animals in corrals at the end of FY 1985.

## LEGISLATION REQUIRED BY THE PRESIDENT'S 1986 BUDGET

BUREAU: Bureau of Mines

1. **Legislation to be submitted by the President:**

   - None

2. **Legislative Proposal included in the Appropriations Language:**

   - None

## LEGISLATION REQUIRED BY THE PRESIDENT'S 1986 BUDGET

**BUREAU:** Bureau of Reclamation

1. **Amend authorization for the McGee Creek Project, Oklahoma, to authorize acquisition of title to mineral rights on certain project lands.**

**Language:** (Attached)

**Explanation:**

Public Law 97-88, title II, section 205 provides for the purchase of mineral rights in fee title only under permanent structures and subordination of mineral rights for the remaining project lands. Upon preparation of a supplement to the final Environmental Impact Statement and review of project purposes, it was determined that minerals should be purchased in fee title in the reservoir area, the Natural Scenic Recreation Area, and other recreational which are part of the project, but are not permanent structure features.

It is anticipate that draft legislation will be sent to the Congress for referral to the appropriate authorizing committee as soon as it is available.

2. **Legislative Proposal included in the Proposed Appropriations Language:**

| Topic | Justification Page #'s |
|---|---|
| o Establish Working Capital Fund | Page-530 |

# A BILL

To amend the Energy and Water Development Appropriation Act of December 4, 1981, Public Law 97-88, Title II, Section 205, Stat. 1141 (1982)

Appropriations in this title shall be available for acquisition of minerals for the McGee Creek Project, Oklahoma; Provided, that minerals beneath land required for the dam, damsite structures, dike, areas designated for recreational development (damsite, dike, and Potapo Point), reservoir to the spillway crest elevation, and minerals beneath lands included within the Natural Scenic Recreation Area boundary shall be acquired in fee title. All mineral acquisitions will be done in accordance with standard blocking procedures. Provided further, that minerals and subsurface interests in all other areas within the project boundaries (including the Wildlife Management Area) shall be subordinated in such a manner to permit the owners of minerals and subsurface interests to explore, extract, and develop such minerals and subsurface interests, subject to stipulations deemed necessary by the Bureau of Reclamation to protect operational and environmental aspects of the project.

# BUREAU OF RECLAMATION

## Explanation of Changes in Language, Fiscal Year 1986

## GENERAL PROVISIONS

### Deletion of Section 205 which made the cost of work underway at Twin Buttes Dam, Texas, nonreimbursable.

The work underway at Twin Buttes Dam, Texas, will be completed in fiscal year 1985.

### Deletion of Section 206 which makes the cost of work planned or underway at Foss Dam, Oklahoma, nonreimbursable and nonreturnable.

The language as stated makes the whole program for this project nonreimbursable now and in the future. Therefore, it is not needed in the fiscal year 1986 language.

### Deletion of Section 207 which pertains to the Garrison Diversion Unit review.

This section directs the establishment of a Secretarial commission to examine the water needs of North Dakota and propose modifications to the Garrison Diversion Unit and is not needed in fiscal year 1986.

### Addition of language to establish a Working Capital Fund for the Bureau of Reclamation.

The purpose of the language is to establish a working capital fund to provide for more efficient financing and financial management of certain activities of the Bureau of Reclamation.

The current method of financing certain support activities using appropriation reimbursements and advances to Trust Funds and Consolidated Working Funds is complicated and inefficient. The cost of equipment and other resources used to provide these support activities is mingled in the accounts, in the budget presentation, and on financial reports with the costs for other activities. The different funds involved in the current method of financing complicates accounting. Equipment needs are sometimes constrained and equipment and other costs cannot be equitably distributed.

The activities which would be financed by the proposed working capital fund are of the type well suited for financing by such a fund. They are continuous, to a degree independent of program considerations, and are provided to many users.

The fund would provide a number of other advantages. Equipment, materials, and supplies could be procured at times when prices are reasonable. The inducement to year-end buying would be removed. Equipment, in some cases, could be purchased rather than leased resulting in lower overall costs.

Financing activities of this nature through a single source, such as a working capital fund, customarily fosters more effective and economical management. Fund financial statements will clearly indicate, through profit and loss, whether or not all costs are recovered.

Appropriations to the Bureau would be slightly reduced since full costs would be recovered from users and all fund revenues would be available without appropriation. No additional personnel would be needed.

## LEGISLATION REQUIRED BY THE PRESIDENT'S 1986 BUDGET

**BUREAU:** Bureau of Indian Affairs

1. **Legislation to be submitted by the President:**

   o To add a representative of the Indian governments to the membership of the Advisory Commission on Intergovernmental Relations.

**Language:** (Attached)

**Explanation:**

This Administration is committed to the continuation of the government-to-government relationship between the Federal Government and Indian tribal governments. In recognition of this, the draft bill would authorize an additional (twenty-seventh) member of the Advisory Commission on Intergovernmental Relations to be appointed by the President either from a panel of at least two elected Indian tribal government officials submitted jointly by the National Congress of American Indians and the National Tribal Chairmen's Association, or from among Indian tribal government officials nominated by governing bodies of Indian tribes as defined in the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).

The Act establishing the Commission includes within the purposes and duties of the Commission the representation of all general purpose units of governments. We believe that such representation is not complete without the inclusion of Indian tribal governments.

The draft bill will be transmitted to Congress by March 15, 1985, for referral to the appropriate authorizing committee.

2. **Legislative Proposal included in the Proposed Appropriations Language:**

| Topic | Justification Page #'s |
|---|---|
| o None | |

# A BILL

To add a representative of Indian tribal governments to the membership of the Advisory Commission on Intergovernmental Relations.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 3(a) of Public Law 86-380 (42 U.S.C. 4273) is amended—

(1) by striking out "twenty-six members" and inserting in lieu thereof "twenty-seven members";

(2) by striking out "and" at the end of paragraph (6) of such section, and by striking out the period at the end of paragraph (7) and inserting in lieu thereof "; and"; and

(3) by inserting immediately after such paragraph (7) the following new paragraph:

"(8) One appointed by the President either from a panel of at least two elected Indian tribal government officials submitted jointly by the National Congress of American Indians and the National Tribal Chairmen's Association, or from among such other Indian tribal government officials as may be nominated by governing bodies of Indian tribes as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).".

## LEGISLATION REQUIRED BY THE PRESIDENT'S 1986 BUDGET

Bureau: Fish and Wildlife Service

1. Legislation to be submitted by the President:

   - o None

2. Legislative Proposals included in the Proposed Appropriations Language:

| Topic | Justification Page #'s |
|---|---|
| o Sport Fish Restoration | FWS-222, 223 |
| o Fish and Wildlife Foundation | FWS-281, 284 |

DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE

SPORT FISH RESTORATION

For expenses necessary to carry out the purposes of the Act of August 9, 1950, (64 Stat. 430; 16 U.S.C. 777, et seq.) an amount equal to revenues credited during fiscal year 1985 to the Sport Fish Restoration Account from excise taxes under Section 4161 of the Internal Revenue Code: Provided, That, the section entitled "Federal Aid in Fish Restoration and Management" in the Department of the Interior Appropriation Act, 1952 (65 Stat. 262) is hereby repealed.

## Justification of Proposed Language Change

### SPORT FISH RESTORATION

"For expenses necessary to carry out the purposes of the Act of August 9, 1950 (64 Stat. 430; 16 U.S.C. 777, et seq.) an amount equal to revenues credited during fiscal year 1985 to the Sport Fish Restoration Account from excise taxes under section 4161 of the Internal Revenue Code: Provided: That the section entitled "Federal Aid in Fish Restoration and Management" in the Department of the Interior Appropriation Act, 1952 (65 Stat. 262) is hereby repealed."

The budget proposes to make this account subject to the annual appropriation process and disallows the diversion of existing revenue from import duties and the motorboat fuel tax. Deficit reduction is of the highest priority to both Congress and the Administration. The proposal follows the user pay principal by proposing a level equal to the excise fees collected on fishing equipment. This proposal still provides for an increase of approximately $6.0 million above the 1985 level in spite of the overall spending freeze proposed elsewhere in the budget.

U.S. FISH AND WILDLIFE SERVICE

### ADMINISTRATIVE PROVISIONS

Appropriations and funds available to the United States Fish and Wildlife Service shall be available for purchase of not to exceed [206] 191 passenger motor vehicles of which [172] 178 are for replacement only (including [64] 67 for police-type use); purchase of [2] 4 new aircraft for replacement [only]; acceptance of one donated aircraft as an addition; not to exceed [$200,000] $400,000 for payment, at the discretion of the Secretary, for information, rewards, or evidence concerning violations of laws administered by the United States Fish and Wildlife Service and miscellaneous and emergency expenses of enforcement activities, authorized or approved by the Secretary and to be accounted for solely on his certificate; repair of damage to public roads within and adjacent to reservation areas caused by operations of the United States Fish and Wildlife Service; options for the purchase of land at not to exceed $1 for each option; facilities incident to such public recreational uses on conservation areas as are not inconsistent with their primary purpose; and the maintenance and improvement of aquaria, buildings, and other facilities under the jurisdiction of the United States Fish and Wildlife Service and to which the United States has title, and which are utilized pursuant to law in connection with management and investigation of fish and wildlife resources. *Provided, That, pursuant to Public Law 98-244, funds advanced to or spent by the Fish and Wildlife Service for costs of the National Fish and Wildlife Foundation shall be repaid to the Fish and Wildlife Service from donations received by the Foundation and credited to the appropriation current at the time the payment is received.

(Department of the Interior and Related Agencies Appropriations Act, 1985, as included in Public Law 98-473).

The Service requests authority to accommodate the operation of one aircraft that may become available through court ordered action following aircraft seizure, forefiture, or abandonment procedures in the course of conducting law enforcement investigations. This authority would permit the thorough examination and performance of any necessary maintenance/repairs prior to operation of the aircraft. This aircraft will then be used in standard law enforcement investigations (including those dependent on low level flight capabilities (to obtain evidence, such as existence of baited fields, location of remote criminal activities/encampments, observation of isolated wetland easement violations, and furtherance of Airborne Hunting Act violation investigations. This aircraft would be acquired at no cost to the Government. Such aircraft would not be used to provide passenger transportation/"taxi" services.

The increase from $200,000 to $400,000 authority for payment at the discretion of the Secretary for information, rewards or evidence is necessary due to the large number of extensive covert operations the Service has been conducting during recent years. During fiscal year 1984, the Service paid $200,000 for expenses for payments of information, rewards and evidence. With an expanding law enforcement activity, the current administrative provision may unnecessarily restrict the Service in aggressively pursuing law enforcement investigations. The Service has recently established a mechanism for payment of rewards related to investigations of Lacey Act violations from penalities, fines and forfeitures collected by the courts. Although these funds are permanently available to the Service and no further congressional action is necessary; the administrative provision places a limitation on the annual payment level.

The proposed language will allow the Service to be repaid from funds advanced to or spent for costs of the National Fish and Wildlife Foundation instead of being deposited in Treasury as miscellaneous receipts.

## LEGISLATION REQUIRED BY THE PRESIDENT'S 1986 BUDGET

BUREAU: Office of the Secretary

1. Legislation to be submitted by the President:

   o None

2. Legislative Proposal included in the Proposed Appropriations Language:

| Topic | Justification Page #'s |
|---|---|
| o None | |

## LEGISLATION REQUIRED BY THE PRESIDENT'S 1986 BUDGET

**BUREAU:** Office of the Inspector General

1. **Legislation to be submitted by the President:**

   o None

2. **Legislative Proposal included in the Proposed Appropriations Language:**

| Topic | Justification Page #'s |
|---|---|
| o None | |

Bureau: Minerals Management Service

1. Legislation to be submitted by the President:

   None

2. Legislative Proposals included in the Appropriations Language:

| Topic | Justification Page #'s |
|---|---|
| o Proposed deduction of mineral leasing costs from receipts prior to computing payments to States from onshore mineral leasing revenues. | MMS-9,11,133,134,135 and 136 |
| o Proposal to require Federal government to pay only the costs of reproduction when acquiring geologic and geophysical data under an OCS permit. | MMS-9,11 and 53 |
| o Proposal to phase-out the Royalty-in-Kind Program. | MMS-9,11,80 and 81 |
| o Proposal to authorize use of a portion of Federal onshore mineral leasing revenues to pay interest on late payments to States and Indian lessors. | MMS-128,129,137 and 138; also MMS-140-145 covering same proposal for FY 1985 |

## Appropriation Language Sheet

## [LEASING] MINERALS AND ROYALTY MANAGEMENT

For expenses necessary for minerals leasing and environmental studies, regulation of industry operations, and collection of royalties, as authorized by law; for enforcing laws and regulations applicable to oil, gas, and other minerals leases, permits, licenses and operating contracts; and for matching grants or cooperative agreements; including the purchase of not to exceed 8 passenger motor vehicles for replacement only; [$166,818,000 of which not less than $39,890,000 shall be available for royalty management activities including general administration: Provided, That of the funds appropriated for the Minerals Management Service, $50,000 shall be available for administrative, travel, communications, per diem, and other necessary expenses incurred by a nonprofit inter-industry organization in conducting meetings and workshops related to Outer Continental Shelf activities off Alaska.] $154,241,000, of which $2,000.000 shall remain available until expended: Provided, that notwithstanding any other provision of law, $125,200,000 shall be deducted from Federal onshore mineral leasing receipts prior to the division and distribution of such receipts between the States and the Treasury and shall be credited to miscellaneous receipts of the Treasury: Provided further, That notwithstanding any other provision of law, when in 1986 and thereafter any permittee provides data and information to the Secretary pursuant to section 1352(a)(1)(C)(iii) of title 43, United States Code, the Secretary shall pay only the reasonable cost of reproducing such data and information: Provided further, That notwithstanding any other provision of law, in 1986 and thereafter, the Secretary shall enter into no new agreements to accept payment of royalties "in kind" unless the Secretary determines that such agreements are necessary due to a national emergency. (30 U.S.C. 181 et seq., 1701 et seq.; 43 U.S.C. 1331 et seq., 1801-1802; Department of the Interior and Related Agencies Appropriation Act, 1985, as included in Public Law 98-473.)

## Justification of Proposed Language Changes

## Minerals and Royalty Management

1. Deletion: "Leasing" from the title of the appropriation.

   The word "Leasing" is restrictive and not fully descriptive of the missions of the Service. The Minerals Management Service is responsible not only for leasing, but also for resource evaluation, environmental studies and assessments, prelease geological and geophysical permitting, and regulation of operations on offshore leases, including technology assessments.

2. Addition: "Minerals" to the title of the appropriation.

   This addition better describes the range of responsibilities and all of the activities of the Minerals Management Service.

3. Deletion: "of which not less than $39,890,000 shall be available for royalty management activities including general administration."

   This internal limitation of the funds appropriated is unnecessary since royalty management activities are earmarked for a specific amount through the Royalty Management budget activity.

4. Deletion: "Provided, That of the funds appropriated for the Minerals Management Service, $50,000 shall be available for administrative, travel, communications, per diem, and other necessary expenses incurred by a nonprofit inter-industry organization in conducting meetings and workshops related to Outer Continental Shelf activities off Alaska."

   The Fiscal Year 1985 language provides funding for a nonprofit inter-industry organization to conduct meetings and workshops related to Outer Continental Shelf activities off Alaska. By Fiscal Year 1986, the input gathered from these meetings and workshops will have been incorporated into the 5-Year OCS Oil and Gas Leasing Program; therefore, the funding requirement for this endeavor will no longer be necessary.

5. Addition: "of which $2,000,000 shall remain available until expended:"

   Funding for the collection of geologic and geophysical (G&G) data, due to changing obligation levels would be better served by no year appropriation authority. At the beginning of each fiscal year, G&G data acquisition needs are determined and prioritized. However, the availability of data is primarily a function of the exploration needs and plans of industry and of the need for data for tract evaluation for specific tracts bid on in OCS sales. Additionally, the "field season" for data collection in some regions does not commence until late in the fiscal year. Consequently, MMS is frequently unable to inspect, select, and acquire data until very late in the year. The above proposal will allow MMS to better manage its resources and accommodate fluctuations, such as the amount of G&G data available for acquisition.

6. Addition: "Provided, That notwithstanding any other provision of law, $125,200,000 shall be deducted from Federal onshore mineral leasing receipts prior to the division and distribution of such receipts between the States and the Treasury and shall be credited to miscellaneous receipts of the Treasury."

   Beginning in FY 1986, the Administration proposes that the relevant onshore mineral leasing costs of the MMS, the Bureau of Land Management, and the Forest Service be deducted from Federal onshore mineral leasing receipts before such receipts are distributed between the Treasury and the States. Historically, the States have shared in gross receipts from the onshore minerals program without taking into account the Federal costs of obtaining and distributing these receipts. States receive at least fifty (50) percent of the receipts from onshore mineral leasing, but this percentage is now proposed to be based on net receipts after deducting the cost of program management. This formula represents an equitable distribution of the receipts remaining after paying the Federal costs necessary in obtaining those receipts.

7. Addition: "Provided further, That notwithstanding any other provision of law, when in 1986 and thereafter, any permittee provides data and information to the Secretary pursuant to Section 1352(a)(1)(C)(iii) of Title 43, United States Code, the Secretary shall pay only the reasonable cost of reproducing such data and information."

   Historically, reimbursements were budgeted in the Outer Continental Shelf Lands (OCS) activity for selectively acquired geologic and geophysical (G&G) data. These funds were provided as reimbursements to permittees for data reproduction and certain processing costs which must currently be payed pursuant to specific language in the OCS Lands Act Amendments of 1978, 43 U.S.C. 1801, P.L. 95-372. In FY 1986 and thereafter, G&G data is proposed to be acquired as a condition of the permit (including permits issued prior to FY 1986) with the Government paying only for: The reasonable cost of reproducing such data; the acquisition of G&G data not available under permit to support litigation, Section 8(g) and boundary disputes; and special reprocessing costs when required.

8. Addition: "Provided further, That notwithstanding any other provision of law, in 1986 and thereafter, the Secretary shall enter into no new agreements to accept payment of royalties "in kind" unless the Secretary determines that such agreements are necessary due to a national emergency."

   In the past, through its Royalty-In-Kind Program (under the authority of the Outer Continental Shelf Lands Act Amendments of 1978 and the Mineral Leasing Act), the Department negotiated and managed contracts by which royalty oil was taken in kind and then sold to small refiners. Starting in FY 1986 and thereafter, the Administration proposes to no longer enter into agreements to accept payment of royalties "in kind" unless the Secretary determines a need exists which constitutes a national emergency.

Decrease from FY 1986 Base

(Dollar amounts in thousands)

| | FY 1986 Base | FY 1986 Estimate | Difference |
|---|---|---|---|
| $ | 20,014 | 15,132 | -4,882 |
| (FTE) | (248) | (248) | (--) |

In FY 1986 the Minerals Management Service (MMS) proposes to decrease most of the funding for reimbursement to permittees of costs related to processing geologic and geophysical (G&G) data. MMS will continue to pay for the reasonable cost of reproducing such data and the acquisition and processing or reprocessing costs of certain additional data required to meet Government needs. Total funding in FY 1986 for reimbursement to permittees for reproduction of seismic data and other G&G data will be $2 million.

Historically, reimbursements were budgeted in the Resource Evaluation Program subactivity for selectively acquired G&G data. These funds were provided pursuant to the specific requirements of Section 26 of the OCS Lands Act Amendments of 1978 as reimbursements to permittees for reproduction and processing or reprocessing costs. In FY 1986 MMS proposes to include provisions in the Minerals and Royalty Management appropriation language to eliminate this payment.

Beginning in FY 1986 and thereafter, the Government proposes to require that G&G data acquired (including permits issued prior to FY 1986) under permit be furnished to the Government as a condition of the permit with the Government paying only for: The reasonable cost of reproducing such data; the acquisition of G&G data not available under permit to support litigation, Section 8(g) and boundary disputes; and special processing or reprocessing costs when required to meet Government needs. This would treat permittees the same as leasees with regards to reimbursement for acquired data.

The proposed decrease in funding is contingent upon the FY 1986 Appropriations Act for the Department of Interior and Related Agencies superseding the statutory requirements for reimbursing permittees for the processing of G&G data under Section 26 of the OCS Lands Act Amendments of 1978.

Other decreases in this program amount to $83,000 which result from continuing into FY 1986 those actions taken in FY 1985 by the Minerals Management Service as required by the Deficit Reduction Act of 1984. These funds will be used to offset an increase in FY 1986 in the Offshore Regulatory program.

Distribution of Change by Object Class

The object class detail for the proposed change is as follows:

| | Amount ($000) |
|---|---|
| Travel and Transportation of Persons .................. | $ -83 |
| Other Contractual Services ........................... | -4,799 |
| Total .................... | $ -4,882 |

Reference Data Base Maintenance (+$575,000, +7 FTE)

The reference data base is established when certain basic information submitted by payors and reporters is entered into the systems. Anytime this information changes, revised forms (Payor Information Forms (PIF's), Well Information Forms (WIF's) etc.) are required to be submitted. When monthly report data is submitted, various automated routines perform edits on the incoming data by selecting and comparing specific data elements against the reference data base. If the monthly report data does not agree with the reference data (e.g., the monthly report indicates a different selling arrangement than the selling arrangement shown in the reference lease master) that accounting line item is transferred into a suspense file where it stays until the discrepancy is corrected. The integrity of the Royalty Management accounting systems and, therefore, the ability to distribute funds to Federal, State, and tribal accounts, is highly dependent on the integrity of the reference data base and the ability of Royalty Management Program personnel to keep that base purified and up-to-date.

Maintenance of the reference data base is critically important in supporting the current systems. When staffing levels were assigned for this function, it was estimated that the turnover of data elements in the AFS reference data base alone would be 30 percent per year. In practice, it is 35 to 40 percent per year. FY 1985 funding and FTE for this function total $2.1 million and 58 FTE. The proposed increase of $575,000 and 7 FTE is needed to handle the greater workload experienced.

Penalty Provision Implementation and Litigation Support (+$325,000, +4 FTE)

Implementing the penalty provisions of FOGRMA will require staff in the Lakewood Accounting Center to identify those payors subject to possible penalties for failure to comply with the regulations. Also required is the development of a case file to document the findings which led to the issuance of a penalty notice. This increased caseload requires accounting staff to prepare time-consuming special accountings and produce numerous records. The assessment unit, located in Washington, D.C., will then review the case and assess the penalty, if so determined.

Litigation workload associated with administrative and judicial cases continues to increase. As of January 1985, there are 223 cases requiring action. However, as a result of issuing the implementing regulations for the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA), and the issuance of product value guidelines, it is estimated that this caseload would double by FY 1986, as these regulations and guidelines are tested through the judicial and administrative processes by interested parties. The FY 1985 budget includes $81,000 and 1.1 FTE for this function. An increase of $325,000 and 4 FTE is requested for the additional workload associated with penalty assessment and litigation support.

Royalty-In-Kind Program (-$320,000, -10 FTE)

The Royalty-In-Kind (RIK) Program was instituted to provide a long-term secure supply of crude oil at a reasonable price to small, independent refiners. The taking of royalties-in-kind is a secretarial option based on a determination that a need for such action exists. Present economic conditions reflect a market in which the scarcity of crude oil for small, independent refiners is no longer critical as it was years ago. In addition, the number of independent refiners participating in this program has declined greatly in the last few years. However, the program takes Government resources needed for other purposes and has generated time consuming litigation. Currently, 27 cases are pending in the Interior appeals processes or in court. It is for these reasons that phase-out of this program is proposed. The need for a phased approach is essential for an efficient close-out of the RIK contracts, some of which continue into FY 1987. It is also necessary to audit and reconcile contracts in order that letters of credit and bonds can be released. Finally, the phased close-out of this program is required for continued support needed in numerous RIK litigation cases.

Distribution of Change by Object Class

The object class detail for the proposed $580,000 increase is as follows:

| | Amount ($000) |
|---|---|
| Personnel Compensation | $ +38 |
| Personnel Benefits | +5 |
| Travel and Transportation Persons | +43 |
| Transportation of Things | +10 |
| Communications, Utilities, and Other Rents | +48 |
| Printing and Reproduction | +10 |
| Other Services | +392 |
| Supplies and Materials | +9 |
| Equipment | +25 |
| TOTAL | $ +580 |

## Appropriation Language Sheet

### Payments to States From Receipts Under Mineral Leasing Act

Notwithstanding any other provision of law, in Fiscal Year 1986, monies received from sales, bonuses, royalties (including interest charges collected under the Federal Oil and Gas Royalty Management Act of 1982), and rentals of the public lands under the provisions of the Mineral Lands Leasing Act of 1920, as amended, and the Geothermal Steam Act of 1970, not payable to a State or to the Reclamation Fund shall be available for the payment of interest in accordance with 30 U.S.C. 1721 (b) and (d), prior to credit of such funds to miscellaneous receipts of the Treasury.

## Justification of Proposed Language Change

## Payments to States from Receipts under Mineral Leasing Act

1. Addition: "Notwithstanding any other provision of law, in fiscal year 1986 monies received from sales, bonuses, royalties (including interest charges collected under the Federal Oil and Gas Royalty Management Act of 1982), and rentals of the public lands under the provisions of the Mineral Lands Leasing Act of 1920, as amended, and the Geothermal Steam Act of 1970, which are not payable to a State or to the Reclamation Fund, shall be available for the payment of interest in accordance with 30 U.S.C. 1721 (b) and (d), prior to the crediting of such funds to miscellaneous receipts of the Treasury."

This language has been developed to provide funds for payment of interest due the States and Indian accounts whenever mineral leasing revenue payments are not made by the Government within the timeframes established by the Federal Oil and Gas Royalty Management Act of 1982. Under the proposed language, these interest amounts will be deducted from onshore Federal mineral leasing receipts prior to transfer of the Federal share to miscellaneous receipts of the Federal Treasury. Funding for the interest payments will come from the source generating the revenue -- mineral leasing receipts, rather than from direct appropriations or from the General Fund.

Amounts paid to States are determined in accordance with various laws which specify the percentages of revenues to be paid. The payment a State receives is determined by the total revenues received from minerals leasing and production within their boundaries. A provision of the Federal Oil and Gas Royalty Management Act of 1982 required that, effective October 1, 1983, payments be made on a monthly basis, rather than semi-annually.

All States (except Alaska) are paid fifty (50) percent of the revenues from bonuses, royalties, and rentals resulting from the leasing of mineral resources on public lands under the Mineral Leasing Act of 1920 as amended (30 U.S.C. 191). Revenues produced from leases of potash deposits on public lands are shared in accordance with Section 285 of that Act. The estimate of payments to all States except Alaska for any future fiscal year is an allocation based on the projected total mineral receipts during that year. The actual payments from prior fiscal years is used to determine the estimated allocation by State. Payments to be made to Alaska are determined on a different basis and are computed separately. Alaska receives 90 percent of total revenues including those generated on lands governed by the Alaska National Interest Lands Conservation Act (ANILCA), except on lands leases in the National Petroleum Reserve in Alaska for which Alaska receives 50 percent of the revenues.

Distribution to the States

The method of estimating the mineral revenue distribution to States is displayed on Table 4. First, the total estimate of revenues from onshore minerals production is developed. From this total, the cost of producing, collecting, and distributing Federal onshore mineral leasing revenues borne by the MMS Royalty Management Program, the Bureau of Land Management, and the Forest Service are deducted so as to share equally with the States the actual net returns from mineral leasing programs. Next, the amount collected for distribution by other Federal agencies is deducted. This amount is estimated to be 6 percent of the total revenues collected, as historically experienced. Alaska's estimated receipts are then deducted prior to determination of amounts available for the distribution to the Lower 48 States because of Alaska's unique revenue sharing arrangements. The designated amount to be distributed to Alaska and ANILCA is added to the Lower 48 total to arrive at total distribution amounts to all States.

Under the Federal Oil and Gas Royalty Management Act of 1982, receipts are to be distributed to the States in the month immediately following the month of collection beginning in October, 1983. When estimating the annual amount available for distribution to the States, there is a lag between fiscal years that must be taken into account. Receipts that are collected in September, 1986 (the current fiscal year), will be distributed in October, 1986 (the following fiscal year). Thus, 91 percent of current fiscal year collections and 9 percent of prior year collections are calculated to derive the current year distribution amount. The estimated distribution of this amount is based on the percentage of total mineral leasing revenues historically generated within the boundaries of each State.

Cost Sharing

Beginning in FY 1986, the relevant onshore mineral leasing costs of the MMS, the Bureau of Land Management, and the Forest Service are proposed to be deducted from Federal onshore mineral leasing receipts before such receipts are distributed between the Treasury and the States. Historically, the States have shared the gross receipts of the Onshore Minerals Programs without taking into account the Federal costs of obtaining and distributing those receipts. The Onshore Minerals Programs have been funded entirely by the Federal Treasury, while the States have shared only in distribution of revenues. States receive at least fifty (50) percent of the receipts from onshore mineral leasing, but this percentage would now be based on net receipts after deducting the cost of program management. This formula represents an equal distribution of these costs to the direct beneficiaries of the program rather than to the general public as had previously been the case.

Approximately 74 percent of the MMS' Royalty Management Program workload is dedicated to Federal onshore lease activities, primarily based on the ratio of onshore to offshore producing leases. Another 17 percent of this workload (also based on total producing leases) is related to Indian lands. The cost recovery formula only deducts 74 percent of total Royalty Management Program costs (which includes a pro rata share of administrative costs) from the onshore mineral leasing receipts before distribution between the States and the Treasury. The offsets related to MMS' collection and disbursement costs total $33.2 million. Also, the relevant costs of BLM's fluid and solid energy mineral, and nonenergy minerals leasing programs are deducted ($65.9 million), along with a pro rata share of BLM administrative costs, ($11.9 million), for a total offset in BLM of $77.8 million. In addition, cost sharing includes the relevant onshore mineral leasing costs of the Forest Service's Minerals Area Management Program ($14.1 million). This brings the total cost sharing proposal to $125.2 million in FY 1986.

As can be seen on Table 5, the net effect on this account of the $125.2 million FY 1986 cost sharing will be $53.5 million. Minerals Management Service will review annually the formula for allocating royalty management costs to assure equity among all States that share in these revenues.

Decrease from FY 1986 Base

(Dollar amounts in thousands)

| | FY 1986 Base | FY 1986 Estimate | Difference |
|---|---|---|---|
| $ | 510,455 | 478,283 | -32,172 |
| (FTE) | (---) | (---) | (---) |

In FY 1986 onshore mineral leasing receipts are projected to increase over FY 1985, due primarily to increased royalties from coal leases and rental revenues from oil and gas leases. However, as displayed in tables 4 and 5, as a result of the proposal to deduct the costs of program management and administration from receipts ($125.2 million), payments to States in FY 1986 are reduced by $53.5 million. The net change from the FY 1986 base is therefore, a decrease of $32.2 million.

Table 4

Method of Estimating the FY 1986 Mineral Revenue Distribution to States

(Dollars in millions)

| | Receipts | Payments to States |
|---|---|---|
| Estimated Onshore Mineral Leasing Receipts for FY 1986 | $1,136 | |
| Deduct: | | |
| Cost of Collecting and distributing Federal onshore revenues | 125 | |
| Amounts collected for other distribution (6% of receipts less cost recovery). | 61 | |
| SUBTOTAL | $ 950 | |
| Deduct: | | |
| Designated revenues of $15 million for Alaska; $3 million for ANILCA; and $16 million for NPRA (revenue sharing formula for Alaska uses a different percentage for Alaskan payments, hence, Alaska estimated revenues are deducted prior to lower 48 States distribution) | 34 | |
| SUBTOTAL | $ 916 | |
| 91% (11/12) of $916 million is distributed in FY 1986; | 834 | |
| plus 9% of FY 1985 collections of $1,005. | 90 | |
| TOTAL Lower 48 States' net receipts to be collected in FY 1986 before distribution between Federal and States' share | 924 | |
| Less--Federal Government's share (50%). | 462 | |
| Distribute to Lower 48: | | $ 462 |
| Distribute to Alaska: | | |
| 91% of Alaska and ANILCA FY 1986 monies of $18 million; | 16 | |
| plus 9% of FY 1985 collections of $17 million. | 2 | |
| TOTAL Alaska and ANILCA net receipts to be collected States' share | 18 | |
| Less--Federal Government's share (10%). | 2 | |
| Distribute to Alaska: | | $ 16 |
| Interest on Late Payments | | 1 |
| TOTAL DISTRIBUTION AMOUNTS TO ALL STATES | | $479 |

Table 5

MINERAL REVENUE PAYMENTS TO THE STATES
(Dollar amounts in thousands)

| | FY 1984 Outlays | FY 1985 Estimated Payments | FY 1986 Gross Payments | Cost Recovery | FY 1986 Est. Net Payments |
|---|---|---|---|---|---|
| Alabama | 359 | 248 | 258 | 26 | 232 |
| Alaska | 18,115 | 14,433 | 15,804 | 1,591 | 14,213 |
| Arizona | 3,889 | 2,687 | 2,796 | 281 | 2,514 |
| Arkansas | 995 | 688 | 715 | 72 | 643 |
| California | 57,610 | 39,809 | 41,414 | 4,170 | 37,244 |
| Colorado | 68,309 | 47,202 | 49,105 | 4,944 | 44,161 |
| Florida | 402 | 278 | 289 | 29 | 260 |
| Idaho | 5,379 | 3,717 | 3,867 | 389 | 3,477 |
| Kansas | 1,094 | 756 | 786 | 79 | 707 |
| Louisiana | 1,115 | 770 | 802 | 81 | 721 |
| Michigan | 216 | 149 | 155 | 16 | 140 |
| Mississippi | 558 | 386 | 401 | 40 | 361 |
| Montana | 31,538 | 21,793 | 22,672 | 2,283 | 20,389 |
| Nebraska | 388 | 268 | 279 | 28 | 251 |
| Nevada | 13,530 | 9,349 | 9,726 | 979 | 8,747 |
| New Mexico | 186,845 | 129,111 | 134,317 | 13,523 | 120,794 |
| North Dakota | 14,725 | 10,175 | 10,585 | 1,066 | 9,520 |
| Oklahoma | 2,593 | 1,792 | 1,864 | 188 | 1,676 |
| Oregon | 3,583 | 2,476 | 2,576 | 259 | 2,316 |
| South Dakota | 1,382 | 955 | 993 | 100 | 893 |
| Utah | 46,145 | 31,886 | 33,172 | 3,340 | 29,832 |
| Washington | 1,032 | 713 | 742 | 75 | 667 |
| Wyoming | 276,114 | 190,796 | 198,490 | 19,985 | 178,506 |
| Minnesota | 1 | 1 | 1 | 0 | 1 |
| Texas | 10 | 7 | 7 | 1 | 6 |
| Tennessee | 13 | 9 | 9 | 1 | 8 |
| Ohio | 3 | 2 | 2 | 0 | 2 |
| Subtotal | 735,943 | 510,455 | 531,829 | 53,546 | 478,283 |
| Interest on late payments | | | | | 800 |
| Total | | | | | 479,083 |

## Justification of Program and Performance

Activity: Interest on Late Payments

(Dollar amounts in thousands)

| Activity | | FY 1985 Enacted To Date | FY 1986 Base | FY 1986 Estimate | Inc.(+) Dec.(-) from FY 1985 | Inc.(+) Dec.(-) from Base |
|---|---|---|---|---|---|---|
| Interest on Late Payments | $ | — | 800 | 800 | +800 | — |
| | (FTE) | (—) | (—) | (—) | (—) | (—) |

| | |
|---|---|
| 30 U.S.C. 191 et seq.<br>P.L. 66-146 | The Mineral Lands Leasing Act of 1920, as amended, provides for the sharing of receipts with States on a monthly basis from various mineral leasing activities on Federal lands within their boundaries. |
| 30 U.S.C. 1714, 1721(b), 1721(d)<br>P.L. 97-451 | The Federal Oil and Gas Royalty Management Act of 1982 provides for timely payments of royalty funds from oil and gas production on Indian lands to Indian accounts and for payments of interest to States and Indian accounts when funds are not disbursed as required by 30 U.S.C. 191 and 1714. |

### Interest on Late Payments

Objectives:

- Provide interest to States and Indian accounts when mineral leasing revenues are not disbursed by the dates prescribed in 30 U.S.C. 191 and 1714.

Base Program:

The Federal Government shares revenues from Federal mineral leasing activites within a State's boundaries with that State. Indian lessors receive all the revenue from mineral leasing activities on their land. The Minerals Management Service collects, processes, accounts for, audits, and distributes all bonuses, rents, royalties, penalties and interest due the Federal Government, States and various Indian accounts from such mineral leasing activities. Funding for this service is provided by three subactivities within the Royalty Management budget activity of the Minerals and Royalty Management appropriation -- Mineral Revenue Collections, Mineral Revenue Compliance, Systems Development and Operation. These three subactivities have an annual, definite budget authority. A permanent, indefinite appropriation (Payments to States from

Receipts under Mineral Leasing Act) exists to provide payment of the States' share of revenues. It is being proposed that payments of interest to States and Indian accounts when such revenues are not disbursed within the timeframes prescribed by the Federal Oil and Gas Royalty Management Act of 1982, also be paid out of this permanent appropriation.

Interest on Late Payments to States. The Federal Oil and Gas Royalty Management Act of 1982 changed the distribution of payments to the States for their share of mineral leasing revenues from a semi-annual to a monthly schedule. The Act provided that interest computed at a rate applicable under Section 6621 of the Internal Revenue Code of 1954 would be owed for any payment not made by the last day of the month following the month in which the revenues have been received. It is estimated that $640,000 will be due States for interest payments in FY 1986.

Interest on Late Payments to Indian Accounts. The Federal Oil and Gas Royalty Management Act of 1982 provided that deposits of any royalty funds from oil or gas production on Indian lands will be made to appropriate Indian accounts at the earliest practicable date, but in no case later than the last business day of the month in which such funds are received. It further provided that any payment not made by the required date would incur an interest charge computed at the rate applicable under Section 6621 of the Internal Revenue Code of 1954. It is estimated that $160,000 will be due Indian accounts for interest payments in FY 1986.

## DEPARTMENT OF THE INTERIOR

## MINERALS MANAGEMENT SERVICE

### Payments to States From Receipts Under Mineral Leasing Act

(Supplemental now requested under existing legislation)

Notwithstanding any other provision of law, in Fiscal Year 1985, monies received from sales, bonuses, royalties (including interest charges collected under the Federal Oil and Gas Royalty Management Act of 1982), and rentals of the public lands under the provisions of the Mineral Lands Leasing Act of 1920, as amended, and the Geothermal Steam Act of 1970, not payable to a State or to the Reclamation Fund shall be available for the payment of interest in accordance with 30 U.S.C. 1721 (b) and (d), prior to credit of such funds to miscellaneous receipts of the Treasury.

## EXPLANATION OF REQUEST

The Federal Oil and Gas Royalty Management Act of 1982 requires the Government to make payments of interest to States and Indian accounts when Federal onshore mineral leasing revenues due them are not disbursed within the timeframes prescribed by the Act. These payments from receipts under the Mineral Leasing Act cannot be disbursed until a proper determination is made of the source of all incoming royalties. Although the primary causes of delays in disbursement (payor input errors and processing errors) can be minimized, absolute eradication of errors is unlikely. Based on experience during FY 1984, it is estimated that $640,000 will be needed to pay interest to States and $160,000 will be needed to pay interest to Indian accounts on FY 1985 late disbursements. The MMS currently has no source of available funds from which to pay this interest. Therefore, this supplemental is proposed to provide for annual, indefinite authority since absolute amounts cannot be accurately estimated in advance.

Minerals Management Service
FY 1985 Supplemental Request
Interest on Late Payments

SUMMARY OF REQUIREMENTS

Appropriation: Payments to States from Receipts under Mineral Leasing Act

($000)

| Comparison by Activities: | 1984 Actual | 1985 Pending | 1985 Supple. | 1986 Estimate |
|---|---|---|---|---|
| Payments to States ........... | 735,943 | 510,455 | — | 478,283 |
| Interest on Late Payments .... | -- | -- | 800 | 800 |
| Total Payments to States ... | 735,943 | 510,455 | 800 | 479,083 |

## Justification of Program and Performance

**Activity:** Interest on Late Payments

(Dollar amounts in thousands)

| Activity | | 1985 Presently Available | 1985 Proposed Supplemental | 1985 Revised Estimate |
|---|---|---|---|---|
| Interest on Late Payments | $<br>(FTE) | --<br>(--) | 800<br>(--) | 800<br>(--) |

| | |
|---|---|
| 30 U.S.C. 191, *et seq.*<br>P.L. 66-146 | The Mineral Lands Leasing Act of 1920, as amended, provides for the sharing of receipts with States on a monthly basis from various mineral leasing activities on Federal lands within their boundaries. |
| 30 U.S.C. 1714, 1721(b),1721(d) | The Federal Oil and Gas Royalty Management Act of 1982 provides for timely payments of royalty funds from oil and gas production on Indian lands to Indian accounts and for payments of interest to States and Indian accounts when funds are not disbursed as required by 30 U.S.C. 191 and 1714. |

### Interest on Late Payments

**Objectives:**

o Provide interest to States and Indian accounts when mineral leasing revenues are not disbursed by the dates prescribed in 30 U.S.C. 191 and 1714.

**Base Program:**

The Federal Government shares revenues from Federal mineral leasing activities within a State's boundaries with that State. Indian lessors receive all the revenue from mineral leasing activities on their land. The Minerals Management Service collects, processes, accounts for, audits, and distributes all bonuses, rents, royalties, penalties and interest due the Federal Government, States and various Indian accounts from such mineral leasing activities. Funding for this service is provided by three subactivities within the Royalty Management budget activity of the Leasing and Royalty Management appropriation--Mineral Revenue Collections, Mineral Revenue Compliance, and Systems Development and Operation. These three subactivities exist under annual, definite budget authority. A permanent, indefinite appropriation consisting of only one budget activity (Payments to States from Receipts under Mineral Leasing Act) exists to provide payment of the States' share of revenues. The activity proposed by this supplemental will be included in the Payments to States from Receipts under Mineral Leasing Act appropriation and will have annual, indefinite authority to provide payments of interest to States and Indian accounts when mineral leasing revenues due them are not disbursed within the timeframes prescribed by the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA).

Need for Supplemental

The FOGRMA of 1982 changed the distribution of payments to the States for their share of mineral leasing revenues from a semi-annual to a monthly schedule. Section 111 of the Act provides that interest computed at a rate applicable under Section 6621 of the Internal Revenue Code of 1954 is owed for any payment not made by the last business day of the month in which receipts were warranted by the United States Treasury.

Receipts cannot be disbursed to the States until a proper determination can be made of the source of all incoming royalties. In many instances, incoming royalty checks have been received without payor reports identifying the lease number or rates, royalty amounts do not agree with the payor's report, or reports are received without payments. If funds cannot be specifically identified to particular leases they go into a suspense account. These discrepancies need resolution before the information can be incorporated into the monthly receipt distribution and payment disbursement to the various State and Federal receipt accounts. Accordingly, MMS personnel must review and correct these errors in payor reporting before funds will be distributed/disbursed. Minerals Management Service has initiated and will continue its efforts to improve payor reporting. For example, RMP distributes a model payor report each month to limit repetitive errors from occurring and has increased its own followup efforts with payors.

At the time of submission of the FY 1985 Congressional Budget, a funding estimate for these interest payments was not included in the request because:

- Decisions were required as to what types of undisbursed funds would be interest bearing. The Department has interpreted the intent of the law to be that all monies received but not disbursed to the States in the timeframe required by the Act, regardless of the reason, would bear interest when finally disbursed.
- The Act did not become effective until FY 1984. Without any prior experience on disbursements with the newly implemented Auditing and Financial System (AFS), an accurate estimate of the amount of late payments was difficult to make. Now, based on experience during FY 1984, it is estimated that $640,000 will be needed to pay interest to the States on FY 1985 late disbursements.

The FOGRMA also provides that deposits of any royalty funds from oil or gas production on Indian lands will be made to appropriate Indian accounts at the earliest practicable date, but in no case later than the last business day of the month in which such funds are received. Once again, any deposit not made by the required date will include an interest charge computed at the rate applicable under Section 6621 of the Internal Revenue Code of 1954. It is estimated that $160,000 will be due Indian accounts for interest payments on FY 1985 late disbursements.

The MMS currently has no source of available funds from which to pay this interest. To provide a source of funding, the Department explored the possibility of establishing an interest bearing suspense account, the interest from which would be used to pay interest to the States. However, legal authority to establish such an account does not currently exist. An amendment to the Mineral Lands Leasing Act of 1920 or FOGRMA would be required. Even then, under FOGRMA the interest rate on late payments to States and Indian accounts would be higher than the rate normally paid by Treasury on funds in interest bearing suspense accounts. Depending on the average balance of funds in the suspense account, this "interest gap" might have to be compensated for by transferring funds into the interest bearing account from the general fund or some other account. Because of these complications, establishment of an interest bearing suspense account is not considered to be the preferred alternative.

The establishment of a separate budget activity in this account with annual, indefinite authority is being requested for the following reasons:

- o While an estimate of the amount required for interest payments has been made, the actual amount cannot be accurately predicted in advance and is only partially within the control of Royalty Management personnel. Indefinite authority is most appropriate in this situation. Further, the amount of these payments will fluctuate with the amount and timeliness of mineral leasing revenue disbursements. Indefinite authority will avoid surplus or deficit funding situations in the operational subactivities funded by a definite appropriation. This, in turn, will minimize the unpredictability and potentially damaging impact of interest payment fluctuations on other MMS operations.

- o Payments of interest on late payments to the States and Indian accounts is mandatory under 30 U.S.C. 1721(b) and (d).

## LEGISLATION REQUIRED BY THE PRESIDENT'S 1986 BUDGET

BUREAU: U. S. Geological Survey

1. Legislation to be submitted by the President:

   - None

2. Legislative Proposal included in the Appropriations Language:

| Topic | Justification Page #'s |
|---|---|
| o Proposal to establish amortization fund to finance replacement or expansion of telecommunication systems. | GS-10 and 11 |

## GEOLOGICAL SURVEY

### *Federal Funds*

**General and special funds:**

SURVEYS, INVESTIGATIONS, AND RESEARCH*

For expenses necessary for the Geological Survey to perform surveys, investigations, and research covering topography, geology, and the mineral and water resources of the United States, its Territories and possessions, and other areas as authorized by law (43 U.S.C. 31, 1332 and 1340); classify lands as to their mineral and water resources; give engineering supervision to power permittees and Federal Energy Regulatory Commission licensees; administer the minerals exploration program (30 U.S.C. 641); and publish and disseminate data relative to the foregoing activities; [$420,664,000] *$406,670,000*: *Provided*, That [$52,066,000] *$50,717,000* shall be available only for cooperation with States or municipalities for water resources investigations: *Provided further*, That no part of this appropriation shall be used to pay more than one-half the cost of any topographic mapping or water resources investigations carried on in cooperation with any State or municipality: *Provided further, That in fiscal year 1986 and thereafter, all amortization fees resulting from the Geological Survey providing telecommunications services shall be credited to this appropriation and be available for replacement or expansion of telecommunications services, to remain available until expended: Provided further, That funds appropriated in accordance with the Water Resources Research Act of 1984, Public Law 98-242, are to remain available until expended: Provided further*, That the Geological Survey is authorized to accept lands, buildings, equipment, and other contributions from public and private sources and to prosecute projects in cooperation with other agencies, Federal, State, or private. *(Department of the Interior and Related Agencies Appropriations Act, 1985, as included in Public Law 98-473.)*

## Justification of Proposed Language Change

## Surveys, Investigations, and Research

1. Addition: Provided further, That in fiscal year 1986 and thereafter, all amortization fees resulting from the Geological Survey providing telecommunications services shall be credited to this appropriation and be available for replacement or expansion of telecommunications services, to remain available until expended.

OMB Circular A-121 authorizes and requires that organizations providing ADP and telecommunications services, identify unfunded costs resulting from equipment and software depreciation, and include those costs in user charges; furthermore, that these funds may be used for replacement or augmentation of ADP capital assets provided and such usage is specifically approved in the budget and appropriation requests. These funds are being requested to be allowed to accumulate in a no-year account until necessary, for the specific purpose of replacement or augmentation of the system.

2. Addition: Provided further, That funds appropriated in accordance with the Water Resources Research Act of 1984, Public Law 98-242, are to remain available until expended.

The Water Resources Research Act of 1984, Public Law 98-242, authorizes funds to be available until expended for Sections 104, 105, and 106. Water related research activities to be funded under the act will be complex and diverse. In recognition of this, the USGS is establishing procedures for the review and selection of grant projects that will involve extensive consultation and coordination with State and regional organizations, require the orderly examination of State and regional organizations, and require the orderly examination of the scientific/technical merits of proposed projects. The proposal that appropriations under the act remain available until expended will significantly enhance the utilility of the review and coordination process and provide greater assurance that those grants selected for funding represent the best candidates for generating useful new insights regarding water resources issues and problems.

## LEGISLATION REQUIRED BY THE PRESIDENT'S 1986 BUDGET

**BUREAU:** Office of Surface Mining

1. Legislation to be submitted by the President:

   - None

2. Legislative Proposal included in the Appropriations Language:

   None

## LEGISLATION REQUIRED BY THE PRESIDENT'S 1986 BUDGET

BUREAU: Territorial and International Affairs

1. **Legislation to be submitted by the President:**

   - Revision of legislation establishing the Commonwealth of the Northern Mariana Islands to alter a formula specifying levels of direct grants. The funding level for the Northern Mariana Islands will be discussed in negotiations this spring. It is hoped that negotiations will be concluded by June 1. No bills to alter the formula will be submitted until that time.

2. **Legislative Proposal included in the Appropriations Language:**

   None

2. Question: Would you provide for the record a list of any fiscal year 1985 supplemental or deferral requests by appropriations account?

Answer: We have several types of supplementals currently pending. They are as follows:

Program Supplementals

(Dollar amounts in thousands)

| Bureau/Appropriation | Amount Requested |
|---|---|
| MINERALS MANAGEMENT SERVICE | |
| Payments to States from Receipts Under Mineral Leasing Act -- For interest payments to States and Indian accounts. | $ 800 |
| OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT | |
| Regulation and Technology -- For Federal regulatory program in Tennessee and improved penalty assessments and collections. | 4,800 |
| TERRITORIAL AND INTERNATIONAL AFFAIRS | |
| Administration of Territories -- For Northern Mariana Islands Covenant inflation adjustment. | 1,994 |
| Subtotal, Program Supplementals | 7,594 |

Fire Suppression Supplementals

To be derived by transfer from National Park Service, Construction (Trust Funds) to restore funds transferred to other accounts to cover costs of 1984 fire fighting and emergency rehabilitation of burned-over lands. (Does not include $4.9 million from National Park Service, National Capital Region Arts and Cultural Affairs, to be transferred to Bureau of Indian Affairs (BIA), Construction in FY 1986 to cover remaining FY 1984 BIA fire costs.)

| | |
|---|---|
| BUREAU OF LAND MANAGEMENT | |
| Oregon and California Grant Lands | (3,000) |
| Land Acquisition | (2,000) |
| U.S. FISH AND WILDLIFE SERVICE | |
| Construction and Anadromous Fish | (4,000) |
| NATIONAL PARK SERVICE | |
| Land Acquisition and State Assistance | (3,216) |
| BUREAU OF INDIAN AFFAIRS | |
| Construction | (12,850) |
| Subtotal, Fire Suppression Supplementals (derived by transfer) | (25,066) |

Pay Supplementals

| | |
|---|---|
| BUREAU OF LAND MANAGEMENT | |
| Management of Lands and Resources -- To be derived by transfer from NPS, Construction (Trust Fund). | (2,000) |
| OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT | |
| Regulation and Technology -- To be derived by transfer from OSM, Abandoned Mine Reclamation Fund prior-year unobligated balances. | (455) |
| NATIONAL PARK SERVICE | |
| Operation of National Park System -- To be derived by transfer from NPS, Construction (Trust Fund). | (10,700) |
| BUREAU OF INDIAN AFFAIRS | |
| Operation of Indian Programs -- To be derived by transfer from BIA, Construction. | (5,000) |
| OFFICE OF THE SOLICITOR -- To be derived by transfer from NPS Construction (Trust Fund). | (406) |
| Subtotal, Pay Supplementals (derived by transfer) | (18,561) |

2. (Continued)

Language Supplementals

(Dollar amounts in thousands)

| Bureau/Appropriation | Amount Requested |
|---|---|
| FISH AND WILDLIFE SERVICE | |
| Resource Management -- To reduce the amount of funds required to be obligated for the Youth Conservation Corps program from $3.3 million to $1.3 million. | -- |
| NATIONAL PARK SERVICE | |
| Operation of the National Park System -- To reduce the amount of funds required to be obligated for the Youth Conservation Corps program from $3.4 million to $1.5 million. | -- |
| Total, FY 1985 Supplemental Appropriations | $ 7,594 |

## PROPOSED F.Y. 1985 DEFERRALS

(In thousands of dollars)

| Bureau/Appropriation | Appropriation Enacted | Rescission/ Deferral | Amount Remaining |
|---|---|---|---|
| DEFERRALS | | | |
| NATIONAL PARK SERVICE | | | |
| Construction (Trust Fund) ..................... | 14,000 5/ | -10,172 6/ | 3,828 |
| Construction (Trust Fund) ..................... | 28,000 5/ | -28,000 6/ | --- |
| Land Acquisition and State Assistance ......... | $ 147,216 | $ -2,901 7/ | $ 144,315 8/ |
| Total, Deferrals ....................... | | $ -41,073 | |

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5/ Appropriation to liquidate contract authority for the Cumberland Gap Tunnel project were provided in 1984 ($14 million) and 1985 ($28 million) Construction appropriations.

6/ Deferral pending Congressional consideration of supplemental appropriation language to transfer funds to other accounts for pay costs in BLM, NPS, and SOL and to restore funds transferred out for 1984 fire protection costs.

7/ Proposed appropriation language would make $852,000 of State grant contingency funds available for State grant administration.

8/ Excludes proposed rescissions of $30,052.

3. Question: Would you provide for the record a list of any current or anticipated fiscal years 1985 and 1986 recissions or deferrals pursuant to the Budget and Impoundment Control Act assumed by the proposed budget for fiscal year 1986; copies of the relevant budget justifications; and the status of such proposed actions?

PROPOSED FY 1985 RESCISSIONS AND DEFERRALS

(In thousands of dollars)

| Bureau/Appropriation | Appropriation Enacted | Rescission/ Deferral | Amount Remaining |
|---|---|---|---|
| SECTION 2901 RESCISSIONS: | | | |
| BUREAU OF LAND MANAGEMENT | | | |
| Management of Lands and Resources | $ 385,972 | $ -5,778 | $ 380,194 |
| Oregon and California Grant Lands | 54,289 | -679 | 53,610 |
| Working Capital Fund | -- | -2,951 1/ | -- |
| Subtotal | | -9,408 | |
| MINERALS MANAGEMENT SERVICE | | | |
| Leasing and Royalty Management | 163,482 | -1,764 | 161,718 |
| OFFICE OF SURFACE MINING | | | |
| Regulation and Technology | 75,092 | -546 | 74,546 |
| Abandoned Mine Reclamation Fund | 296,941 | -333 | 296,608 |
| Subtotal | | -879 | |
| BUREAU OF RECLAMATION | | | |
| Construction Program | 740,000 | -2,571 | 737,429 |
| General Investigations | 35,566 | -209 | 35,357 |
| Operation and Maintenance | 149,689 | -1,540 | 148,149 |
| General Administrative Expenses | 58,917 | -1,468 | 57,449 |
| Subtotal | | -5,788 | |
| GEOLOGICAL SURVEY | | | |
| Surveys, Investigations and Research | 412,251 | -4,519 | 407,732 |
| BUREAU OF MINES | | | |
| Mines and Minerals | 135,959 | -1.355 | 134,604 |
| FISH AND WILDLIFE SERVICE | | | |
| Resource Management | 305,138 | -3,869 | 301,269 |
| Construction and Anadromous Fish | 24,298 | -40 | 24,258 |
| Subtotal | | -3,909 | |
| NATIONAL PARK SERVICE | | | |
| Operation of the National Park System | 612,858 | -8,598 | 604,260 |
| Construction | 111,442 | -397 | 111,045 |
| National Recreation and Preservation | 11,111 | -94 | 11,017 |
| Land Acquisition and State Assistance | 147,216 | -52 | 147,164 |
| Subtotal | | -9,141 | |
| BUREAU OF INDIAN AFFAIRS | | | |
| Operation of Indian Programs | 877,916 | -5,570 | 872,346 |
| OFFICE OF TERRITORIAL AND INTERNATIONAL AFFAIRS | | | |
| Administration of Territories | 75,557 | -107 | 75,450 |
| Total, 2901 Rescissions | | -42,440 2/ | |
| OTHER RESCISSIONS: | | | |
| OFFICE OF SURFACE MINING | | | |
| Abandoned Mine Reclamation Fund (Tennessee Grant Funds) | 296,941 | -2,900 | 294,041 3/ |
| NATIONAL PARK SERVICE | | | |
| Land Acquisition and State Assistance (Contract Authority) | 147,216 | -30,000 | 117,216 4/ |
| Total, Other Rescissions | | -32,900 | |

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1/ From unobligated balances.

2/ Excludes Section 2901 savings of $526,000 in the Office of the Secretary and $376,000 in the Office of the Inspector General which will be used to partially offset costs of the 1985 pay increase.

3/ Excludes Section 2901 rescission of $333,000.

4/ Excludes Section 2901 rescission of $52,000.

4. Question: What are the assumptions behind the proposed FY 1986 lease sales which include four offshore of Alaska, two each in the Gulf of Mexico and the Atlantic, and one off of California?

Answer: Section 18 of the Outer Continental Shelf Lands Act Amendments (OCSLAA) of 1978 requires the Secretary of the Interior to prepare a 5-year OCS oil and gas leasing program which provides for, among other things, an equitable sharing of developmental benefits and environmental risks among the various OCS regions. The current 5-year program, initiated in July of 1982, provides for a balancing of concerns related to energy development, environmental impacts, multiple use of offshore areas, and socioeconomic factors. Adjustments to the schedule have been made in several instances where environmental concerns, other Federal agency impacts, industry, or State interests have warranted such changes. The next 5-year OCS leasing program is being developed now and will dovetail with the current schedule, which ends in June of 1987.

The table on page 23 of the MMS FY 1986 Budget Justification lists seven lease sales currently proposed for FY 1986. They include three offshore of Alaska, three in the Gulf of Mexico, one in the Atlantic, and none offshore California. The three in Alaska are proposed to be held in the North Aleutian Basin, Norton Basin and Navarin Basin in December of 1985, March of 1986, and September of 1986, respectively. The three Gulf sales are proposed for the Eastern, Central and Western Gulf planning areas in November of 1985, April of 1986, and July of 1986, respectively. The Atlantic sale is proposed for the mid-Atlantic planning area in October of 1985.

Several sales have been delayed from their original dates in order to accommodate the concerns outlined above and to permit further consultation with Governors or to refine and expand on environmental analyses. The approach used in each of these sales has been to resolve conflicts between the States and the Department at an early date. The lease sales currently scheduled for FY 1986 reflect this consultation and the intent of the Congress as stated in the OCSLAA.

NATIONAL PARK SERVICE

5. Question: In the FY 1986 budget under the Operation of the National Park System, you propose repeal of Section 402 of Public Law 96-87 which prohibits user fees in Denali National Park, Alaska. In addition, you recommend repeal of those provisions of Public Law 96-514 which provide that revenues from Federal Agency recreation fee collections shall be paid into the Land Water Conservation Fund.

Do you intend to request generic legislation or seek such legislation on a piecemeal basis?

Answer: I intend to request generic legislation which will provide the authority needed to operate a cost-effective and equitable recreation fee program. A proposal is currently being prepared.

Question: Do you intend to ask the Congress to address the Administration's proposed increases in entrance and user fees through the authorization or appropriations process?

Answer: I intend to use the authorization process to request the necessary authority to carry out the proposed recreation fee program. Implementation of the program will require action through the appropriation process as well.

Question: If, as suggested by the Administration, those who benefit directly from a specific Federal service should pay the cost of providing that service, why should increased entrance and user fees be redirected from the Land and Water Conservation Fund?

Answer: I am informed that the policy that "those persons who take advantage of federal outdoor recreation facilities and services should pay a greater share of the cost of providing those opportunities than the population as a whole" was stated in the original Land and Water Conservation Fund Act of 1965 and reaffirmed in subsequent amendments.

Since 1981, recreation fees collected by the National Park Service have been deposited in the Land and Water Conservation Fund. Currently, the authorized uses for these monies are limited to land acquisition, State matching grants, and related administrative expenses. Therefore, recreation fee revenues deposited in the Land and Water Conservation Fund provide no direct benefit to either the collecting parks or the visiting public. By redirecting fee revenues into a separate account, the Administration proposes to put these funds to work for the visiting public. Appropriations from this special account would be used to improve the programs, services and facilities available to park users.

6. Question: In FY 1984, $66.7 million was transferred from the Land and Water Conservation Fund to the Bureau of Land Management to cover fire obligations. According to the FY 1985 Budget, the Department plans to reimburse only $25.1 million of those funds. The remainder of the monies so transferred ($36.7 million) will not be paid.

The Fiscal Year 1984 Interior Appropriations Act, the legal authority for such transfer of Land and Water Conservation Fund monies, requires that such monies must be replenished by supplemental appropriations. Therefore, how do you justify the resultant shortfall of $37.8 million to the fund?

Answer: The need to control Federal spending as a means of reducing the deficit is paramount to the need to replenish the funds transferred to Bureau of Land Management.

7. Question: During the Committee's consideration of your nomination to be Secretary of the Interior, I requested detailed information on the acquisition backlog of the Land and Water Conservation Fund. At that time, you indicated that you had asked that a detailed compilation of costs be prepared and made available to the Committee. What is the status of that list?

Answer: The projected cost of the National Park System areas with completed Land Protection Plans is reflected on the following pages.

This list includes only those areas with completed Land Protection Plans. The cost projections were made without the benefit of field inspections or market data analysis and therefore do not represent the fair market value of the lands or interests to be acquired. In some instances the projections exceed the unappropriated balances of statutory ceilings, which are customarily referred to in backlog listings.

7. (Continued)

National Park Service
Cost Projections based on approved
land protections plans
((Excludes areas without land protection plans)

| Unit | Acres Remaining | Acres to be Acquired * | Cost Projections ** |
|---|---|---|---|
| Adams NHS | 1/ | 1/ | Donation |
| Alibates Flint Quarries NHP | 292 | 292 | 170,000 |
| Allegheny Portage RR NHS | 289 | 247 | 1,900,000 |
| Andersonville NHS | 22 | 14 | Donation |
| Antietam NB | 1,546 | 1,546 2/ | 1,750,000 |
| Apostle Islands NS | 26,031 | 116 | 20,000 |
| Appalachian NST | 53,720 | 3/ | 3/ |
| Appomattox Court House NHP | 2 | 22 4/ | 50,000 |
| Assateague Island NS | 21,856 | 3 | 31,500 |
| Bent's Old Fort NHS | 86 | 40 | 200,000 |
| Big Cypress N. Pres. | 51,351 | 45,552 5/ | 3,250,000 |
| Big Hole NB | 0 | 7 6/ | 35,000 |
| Big Thicket N. Pres. | 6,233 | 5,577 | 8,945,250 |
| Biscayne NP | 78,250 | 77,556 7/ | 7,000,000 |
| Black Canyon of the Gunnison NM | 7,404 | 6,631 | 2,600,000 |
| Boston NHP | 6 | 6 | Donation |
| Boston African American NHS | 0 | 0 | 0 |
| Bryce Canyon NP | 3 | 3 | 5,000 |
| Buffalo N. River | 4,108 | 1,680 | 700,244 |
| Chaco Culture NHP | 10,969 | 10,465 | 849,100 |
| C & O Canal NHP | 6,801 | 1,138 | 2,500,000 |
| Canaveral NS | 15,782 | 15,782 | Donation |
| Cape Hatteras NS | 1/ | 0 | 0 |
| Cape Lookout NS | 5,144 | 3,993 | Donation |
| Capitol Reef NP | 19,152 | 1 | 5,000 |
| Carlsbad Caverns NP | 320 | 320 | Exchange |
| Castillo de San Marcos NM | 1/ | 0 | 0 |
| Channel Islands NP | 238,463 | 59,058 | 40,000,000 |
| Chattahoochee River NRA | 5,073 | 2,364 | 14,000,000 |
| Chickamauga & Chattanooga NMP | 17 | 0 | 0 |
| Chickasaw NRA | 27 | 27 | Donation |
| Coronado N. Mem. | 178 | 57 | 500,000 |
| Cumberland Gap NHP | 4 | 4,423 8/ | 2,250,000 |
| Cumberland Island NS | 17,733 | 15,625 9/ | 12,000,000 |
| Cuyahoga Valley NRA | 18,021 | 5,513 | 70,500,000 |
| Delaware Water Gap NRA | 13,380 | 4,883 | 10,250,000 |
| De Soto N. Mem. | 2 | 0 | 0 |

7. (Continued)

| Unit | Acres Remaining | Acres to be Acquired * | Cost Projections ** |
|---|---|---|---|
| Ebey's Landing NHRes. | 7,412 | 1,590 | 4,000,000 |
| El Morro NM | 239 | 238 | 126,000 |
| Fire Island NS | 13,484 | 21 | 300,000 |
| Fort Caroline N. Mem. | 5 | 4 | 90,000 |
| Fort Donelson NMP | 12 | 12 | 27,000 |
| Fort Frederica NM | 6 | 6 | 825,000 |
| Fort Laramie NHS | 69 | 63 | 129,500 |
| Fort Necessity NB | 8 | 8 | Donation |
| Fort Pulaski NM | 258 | 64 | Donation |
| Fort Raleigh NM | 4 | 3 | Donation |
| Fort Smith NHS | 54 | 51 | 2,976,862 |
| Fort Sumter NM | 2 | 2 | 450,000 |
| Fort Union Trading Post NHS | 42 | 42 | 30,000 |
| Fort Vancouver NHS | 7 | 0 | 0 |
| Friendship Hill NHS | 13 | 13 | Donation |
| Gateway NRA | 5,935 | 0 | 0 |
| Golden Gate NRA | 45,618 | 2,730 | 17,500,000 |
| Golden Spike NHS | 532 | 510 | 250,000 |
| Grand Teton NP | 3,656 | 3,650 | 30,381,000 |
| Great Sand Dunes NM | 2,236 | 2,236 | 300,000 |
| Great Smoky Mtns NP | 266 | 20 | Donation |
| Gulf Islands NS | 60,862 | 23,456 10/ | 3,000,000 |
| Hampton NHS | 0 | 0 | 0 |
| Herbert Hoover NHS | 6 | 1 | Donation |
| Home of FDR NHS | 0 | 2 11/ | 230,000 |
| Homestead NM of America | 12 | 12 | 15,000 |
| Hot Springs NP | 1,037 | 435 | 4,153,765 |
| Independence NHP | 3 | 0 | 0 |
| Indiana Dunes NL | 3,329 | 85 | 1,650,000 |
| James A. Garfield NHS | 4 | 4 | Donation |
| Jean Lafitte NHP | 13,721 | 12,002 | 10,825,000 |
| John Day Fossil Beds NM | 3,273 | 3,132 | 800,000 |
| Johnstown Flood N. Mem. | 8 | 3 | 3,000 |
| Klondike Gold Rush NHP | 10,470 | 375 | 2,000,000 |
| Kaloko-Honokohau NHP | 1,161 | 621 | 50,000,000 |
| Lake Mead NRA | 28,212 | 4,879 | 5,500,000 |
| Lassen Volcanic NP | 6 | 6 | 12,500,000 |
| Lincoln Home NHS | 1/ | 0 | 0 |
| Lincoln Boyhood N. Mem. | 8 | 0 | 0 |
| Lower St. Croix NSR | 2,416 | 1,128 | 3,200,000 |
| Lowell NHP | 134 | 3 | 827,000 |
| Mammoth Cave NP | 827 | 12 | 9,000 |
| Manassas NBP | 1,475 | 1,475 | 7,660,000 |
| Martin Luther King, Jr., NHS | 19 | 10 | 1,250,000 |
| Martin Van Buren NHS | 1 | 1 | 0 |

7. (Continued)

| Unit | Acres Remaining | Acres to be Acquired * | Cost Projections ** |
|---|---|---|---|
| Monocacy NB | 1,233 | 1,182 | 5,500,000 |
| Montezuma Castle NM | 17 | 17 | 50,000 |
| Morristown NHP | 2 | 213 12/ | Donation |
| Mound City Group NM | 97 | 97 | 1,000,000 |
| Mount Rainier NP | 0 | 0 | 0 |
| Natchez Trace Parkway | 57 | 25 | 40,000 |
| New River Gorge N. River | 61,426 | 10,500 | 18,000,000 |
| Nez Perce NHP | 276 | 263 | Donation |
| North Cascades NP | 226 | 226 | 335,000 |
| Obed WSR | 3,927 | 3,927 | 1,900,000 |
| Olympic NP | 10,561 | 3,073 | 20,000,000 |
| Organ Pipe Cactus NM | 1,490 | 210 | 3,000,000 |
| Petersburg NB | 1,212 | 7 | 1,500,000 |
| Pictured Rocks NL | 37,523 | 4,300 | 1,000,000 |
| Piscataway Park | 46 | 46 | Donation |
| Point Reyes NS | 6,882 | 390 | 10,000,000 |
| Redwood NP | 34,853 | 0 | Unknown 13/ |
| Richmond NBP | 0 | 0 | 0 |
| Rocky Mountain NP | 1,026 | 763 | 4,813,500 |
| Ross Lake NRA | 12,442 | 188 | 4,000,000 |
| Sagamore Hill NHS | 0 | 0 | 0 |
| Saguaro NM | 1,616 | 237 | 750,000 |
| Salem Maritime NHS | 1/ | 0 | 0 |
| Salinas NM | 430 | 428 | 716,750 |
| San Antonio Missions NHP | 299 | 162 | 882,400 |
| Santa Monica Mtns NRA | 140,297 | 41,234 | 170,000,000 |
| Saratoga NHP | 809 | 604 | 902,000 |
| Scotts Bluff NM | 61 | 17 | 100,000 |
| Sequoia NP | 718 | 540 | 5,500,000 |
| Shenandoah NP | 64 | 64 | Exchange |
| Shiloh NMP | 55 | 0 | 0 |
| Sitka NHP | 1/ | 53 | 100,000 |
| Sleeping Bear Dunes NL | 15,450 | 2,564 | 7,225,000 |
| Springfield Armory NHS | 34 | 34 14/ | 0 |
| St. Croix Island Int. HS | 13 | 13 | 105,000 |
| St. Croix NSR | 45,007 | 8,409 | 15,112,000 |
| Thomas Stone NHS | 6 | 6 | 65,000 |
| Tuskegee Institute NHS | 50 | 0 | 0 |
| Tuzigoot NM | 752 | 751 | 2,200,000 |
| Valley Forge NHP | 555 | 381 | 2,500,000 |
| Vicksburg NMP | 7 | 5 | Donation |
| Virgin Islands NP | 1,787 | 1,700 | 33,000,000 |
| Voyageurs NP | 87,104 | 2,730 | 5,000,000 |
| War in the Pacific NHP | 1,114 | 246 | 15,000,000 |
| William H. Taft NHS | 1 | 1/ | Donation |
| Wilson's Creek NB | 1/ | 1/ | Donation |
| Zion NP | 3,757 | 3,757 | 1,313,000 |
| Total | 1,282,389 | 411,208 | 672,128,871 |

7. (Continued)

* Acres to be acquired includes state, county, city and private land identified in land protection plans for acquisition by donations, exchanges or purchase.

** Cost projections were made without field inspections, or market data analysis and do not represent appraised values.

Footnotes:

1/ Less than an acre

2/ Easement acquisition only

3/ Not in FLA System

4/ Now encumbered with easements, to be acquired in fee

5/ Approximately 36,000 acres to be donated

6/ ROW acquisiton

7/ Approximately 75,000 acres to be donated

8/ Requires legislation to acquire

9/ Approximately 14,000 acres to be donated

10/ Approximately 22,000 acres to be donated

11/ Congress appropriateed funds for acquisition of 2.5 acres in buffer zone

12/ Existing legislation authorizes acquisition of additional land by donation

13/ Deficiency payment for legislative taking or Big 3 Timber Companies unknown

14/ Public lands to be acquired by donation

03/06/87

8. Question: During your confirmation hearing, I expressed my strong objections to any withholding of revenues provided by 1984 amendments to the Wallop-Breaux Sport Fishing Restoration Fund. Despite indications of strong Administration support for the program, the withholding proposal is included in the 1986 budget request. How can you, or the Administration support this proposal to divert these recreational user funds from their Congressionally directed uses?

Answer: The magnitude of the deficit has forced reconsideration of many of the domestic programs funded and possibly even supported by the Administration in the past. Each year the Executive Department sends to Congress a number of suggested changes in laws enacted earlier. Such proposals are made to correct omissions, control expenditures, improve efficiency, etc. In the 1986 budget submitted to Congress, we proposed the repeal of the permanent appropriation authority to control expenditures. Only if Congress repeals this authority will these funds be diverted.

9. **Question: When do you expect to submit the Department's report on the grazing fee to the Congress?**

**Answer: The draft report is expected to be available around March 27. The final report, which will include a summary of the public comments on the draft, should be ready for transmittal to Congress sometime this summer.**

**Question: Does the $11 million increase assumed by the budget proposal reflect the Department's position?**

**Answer: We will not develop a position on grazing fees until after we carefully review the results of the grazing fee study and public comments. The $11 million estimated increase is strictly for budget revenue projection purposes.**

10. Question: Appropriations language allocating $64,185,000 for expenses necessary to implement the Forest Service - Bureau of Land Management jurisdictional boundary change appears in the National Forest System section of the Appendix to the President's Budget. Briefings to authorizing Committees on the proposed FS-BLM interchange have consistently emphasized the opportunity for public and Congressional participation as interchange plans are being drafted. Shouldn't public hearings be completed before you ask for implementation authority?

Answer: Yes. Public meetings will be completed, and opportunities for public involvement will be provided before the necessary legislation to effect such a transfer is submitted. Further, there will be extensive consultation with Congress.

11. Question: Is the Bureau of Land Management experiencing difficulty in recruiting experienced petroleum engineers to conduct inspections and provide technical support pursuant to the Federal Oil and Gas Royalty Management Act? Would you explain?

Answer: The Bureau, at times, has had difficulty in recruiting petroleum engineers. During oil and gas "boom" periods, it is generally more difficult to recruit and keep experienced petroleum engineers, while during less active periods recruiting is somewhat easier. In any event, it is often difficult to find highly experienced engineers at the pay levels allowed. The Office of Personnel Management considers petroleum engineers to be in a shortage category.

Petroleum engineers work closely with petroleum engineering technicians (PET's) to carry out the inspection requirements of FOGRMA. However, they do not do the actual on-the-ground inspections which are conducted by PET's. Petroleum engineers work on the more technical aspects of the program such as issues related to oil field operations, production evaluation, reviews of drilling plans, drainage determinations, and similar matters.

12. Question: Does the Office of Personnel Management (OPM) consider "Petroleum Engineers" in a shortage category? If so, are there steps OPM could take to mitigate against such a shortage?

Answer: Petroleum engineers are considered by OPM to be a shortage employment category. As such, there are certain incentives which can be offered to new hires for petroleum engineering and other hard-to-fill professional positions which cannot be offered, generally, to other people entering the Federal service. The salary structure for shortage positions is set at a higher rate in comparable grades and steps than the standard GS-series pay schedule. New hires can negotiate for placement at a step level which is higher than step 1 of the placement grade. In addition, certain fringe benefit incentives can be offered such as payment of moving expenses incurred for relocation to the site of their initial Federal assignment.

13. Question: What is the projected time for an oil and gas competitive sale in the National Petroleum Reserve - Alaska?

Answer: A sale is scheduled to be held in August 1985.

14. Question: What is the current backlog of Known Geologic Structure (KGS) determinations?

Answer: The Bureau of Land Management informs me that it has set priorities on completing KGS reviews. First priority is assigned to completing geologic analyses for lands involved in current noncompetitive leasing actions, that is, tracts to be offered in a simultaneous drawing or those covered by over-the-counter lease applications. The backlog of first priority reviews was essentially eliminated during FY 1984. Second priority status is accorded tracts involved in new well completion activity but which are not subject to near-term leasing action. The review of these areas will be current by the end of this fiscal year. Lowest priority is assigned to nonproducing areas having little current interest for drilling or lease offer. These lands will be reviewed as old noncompetitive leases expire, which, essentially, makes them candidates for priority one review. We believe that the number of KGS determinations, or reviews, which are holding up leasing actions is minimal. Our estimate is that the Bureau will complete 1,200 KGS determinations in FY 1985 and 1,300 determinations in FY 1986 thereby eliminating any backlogs of determinations which have the potential of delaying leasing decisions.

15. Question: Other than the use of experienced petroleum engineers for inspection activities, what type of educational background do other BLM inspectors have?

Answer: Most of our oil and gas inspections are performed by Petroleum Engineering Technicians (PET's) who come from a variety of backgrounds - both technical and nontechnical. Some currently on-board PET's have backgrounds in biological sciences, others in earth sciences. Some PET's have had considerable practical experience working in the oil patch. Under the Federal Oil and Gas Royalty Management Act (FOGRMA) of 1982, the Bureau is required to provide adequate training for inspectors. Formal training is provided followed by an apprenticeship under experienced inspectors. Advanced training is also provided. Initial training is given within 6 months of hire. Petroleum engineers do not usually perform on-the-ground inspections.

16. Question: Can you provide the Committee with a breakdown of how many pre-1976 coal leases will be unable to meet the requirements of the Federal Coal Leasing Amendments Act of 1976 and the new guidelines published in the Federal Register on February 15? Would you provide the name(s) of the holders of such leases that would be unable to comply and identify where such leases are located?

Answer: The Bureau of Land Management advises me that there are approximately 400 pre-1976 Federal coal leases that are currently not in production. Were those leases to be held by the current lessee for 10 years as of 1986 and not be producing, the lessees could be prohibited from being issued leases for any commodity pursuant to the Mineral Leasing Act (MLA). However, the number of potential disqualifications under Section 2(a)(2)(A) of MLA on or after August 4, 1986, cannot be determined at this time.

16. (Continued)

The Department expects that the holders of the 400 pre-1976 leases that are most likely to have action taken on their nonproducing Federal coal leases will be the oil companies having coal affiliates/subsidiaries. This is because they could not be issued onshore oil and gas leases if they, and any affiliate, held a nonproducing Federal coal lease on or after August 4, 1986, and have held that lease for 10 years. It should be noted that the "new guidelines" proposed in draft on February 15, 1985, reflect the requirements of Section 2(a)(2)(A) of intent of MLA, which was amended by Section 3 of FCLAA. Those guidelines reflect the intent of the wording of MLA and are not "new" requirements being imposed on lessees holding pre-1976 Federal coal leases.

17. Question: Would you identify the parties that will be involved in the 35 coal lease assignments to be processed in FY-86?

Answer: We cannot ascertain the specific parties that will be involved in the 35 coal lease assignments expected to be submitted for processing during FY 1986. The estimate of a total of 35 is based on increasing industry awareness of the effect of Section 2(a)(2)(A) of MLA on the issuance of any MLA leases on or after August 4, 1986, and the fact that if a Federal coal lease is assigned via an arm's-length assignment, the lessee no longer "holds" that Federal coal lease on or after August 4, 1986, and the lessee would not be subject to the Section 2(a)(2)(A) prohibition.

18. Question: Would you provide a listing of oil and gas leases in special tar sands areas that have or will be converting to combined hydrocarbon leases?

Answer: The following table provided by the Bureau of Land Management shows applications for conversion. Some or all of these applications may not qualify.

Conversion Lease Applications

| Tar Sands Area | Number of Existing O&G Leases | Name of Lessee |
|---|---|---|
| Asphalt Ridge-White Rocks | 1 | F.M. Tully and Rocky Mountain Exploration |
| | 1 | Enercor |
| Circle | 35 | William C. Kirkwook, et al. |
| Pariette | 2 | Enserch Exploration, Inc. |

18. (Continued)

| | | |
|---|---|---|
| P.R. Springs | 2 | Mobil Oil Corp. |
| | 2 | Texaco |
| | 2 | Getty Oil Co. |
| | 1 | J.C. Thompson |
| | 1 | Walter Duncan, et al. |
| | 3 | Enserch Exploration, Inc. |
| | 23 | Enercor |
| | 5 | Bear Tooth Oil & Gas |
| | 1 | Bill Farliegh |
| | 1 | F.J. Bradshaw Estate |
| Hill Creek | 2 | William C. Kirkwood |
| Raven Ridge-Ram Rock | 1 | John H. Trigg |
| | (conversion lease issued effective 2/1/85) | |
| | 1 | William C. Kirkwood |
| San Rafael Swell | 2 | William C. Kirkwood |
| | 1 | Richard J. Valentine |
| Tar Sands Triangle | 4 | Benson-Monin-Greer Drilling Corp. |
| | 50 | Santa Fe Energy Co. and Altex Oil Corporation |
| | 1 | Emery Energy |
| | 1 | Morton M. Pepper |
| | 1 | Maurice W. Brown |
| | 22 | William C. Kirkwood |
| Sunnyside | 7 | Amoco Production Co. |
| | 1 | GMC Energy Corporation |
| | 3 | Enercor |
| | 7 | Mono Power Co. |
| | 5 | Sabine Production Co. |
| | 7 | Enserch Exploration, Inc. |

19. Question: In FY-86, the Bureau proposes to "process 160 mineral patent applications." Would you explain in detail what is involved in "processing" these applications?

Answer: Below is a listing provided by the Bureau of Land Management of the various work elements involved in the "processing" of a mineral patent application:

1. Application for mineral survey of claim received at the BLM State Office (not always required).
    a. State Office personnel check information submitted for completeness.
    b. Accept deposit for office work costs.
    c. Issue Mineral Survey number.
    d. Cadastral Survey authorizes survey and furnishes list of approved mineral surveyors to applicant.

2. Mineral survey is approved.
    a. Cadastral engineer reviews and approves the preliminary plat and field notes received from the mineral surveyor.
    b. The official mineral survey plat is drafted, approved and filed in the records.
    c. A certificate of expenditures is issued to applicant.

3. Application for mineral patent is received in BLM State Office.
    a. BLM logs in application, gives receipt for filing fee, and opens a case file with assigned mineral application serial number.
    b. Case file is forwarded to docket section for serial register page preparation and filing in the public room.
    c. Case file is forwarded to adjudication section.

4. Initial adjudication of application is performed.
    a. Application is checked for completeness.
    b. Solicitor reviews title documents for legal determination that full title vests with applicant.
    c. Publication of "Notice of Application" ordered for the newspaper designated by BLM.
    d. Copy of the published notice posted in BLM State Office public room.
    e. Proof of publication and posting on claim and in public room.
    f. Absent adverse claims, allow payment for acreage to be made and issue receipt.
    g. Prepare Final Certificate for case file and notify applicant with copy of letter to County Recorder.
    h. Forward case file to BLM District Office or Forest Service with request for a mineral examination and report. Update serial register page.

5. Mineral report preparation.
    a. Minerals examiner conducts a field examination of claims including sampling for assay.
    b. Researches mining costs and geologic literature.
    c. Prepares report recommending clearlist for patent or contest action because of lack of a discovery.
    d. If recommended for patent, check is made for existing O&G leases, etc.
    e. Absent any leases, permits or applications, requests report for leasable minerals.

19. (Continued)

6. Final adjudication for issuance of patent.
   a. For claims involving impact on grazing privileges, advise District Manager to cancel grazing authorizations for that area.
   b. Complete Final Certificate listing claims approved for patent and the reservations in the patent.
   c. Issue patent to applicant.
   d. Annotate the public land records accordingly, and update the serial register page.

7. Claims contested based upon the lack of discovery.
   a. BLM prepares contest complaint and notifies applicant by certified mail of the charges.
   b. Claims are declared null and void if charges are not answered by applicant within 30 days. Application is rejected.
   c. If applicant denies charges within the 30-day time limit, the case file is forwarded to Administrative Law Judge for an administrative hearing.
   d. Administrative hearing is held in which the Government mineral examiner and the applicant present testimony, evidence, witnesses, etc. The Judge's decision may:
      (1.) Declare the claim null and void for lack of a discovery; or
      (2.) Find the claim has a discovery and remand the case to BLM for issuance of mineral patent.

20. Question: Are there sufficient licensed mineral surveyors to assure expeditious handling of mineral patent applications?

Answer: The Bureau of Land Management believes there are sufficient mineral surveyors to handle the current volume of mineral patent applications.

21. Question: What are the major differences between BLM and Forest Service regulations governing activities conducted pursuant to the General Mining Law of 1872, as amended?

Answer: BLM's surface management regulations (43 CFR 3809) establish procedures to "prevent unnecessary or undue degradation of Federal lands," as mandated under section 302 of the Federal Land Policy and Management Act of 1976. The Forest Service's goals are generally the same.

The technical differences in the regulations reflect the generally dissimilar nature of NFS lands from the public lands managed by BLM. Thus, FS requires the submission of a notice of intention to operate if a mining claimant proposes to cut any trees, whereas BLM's policy is to require such notice only if the proposal would exceed "negligible surface disturbance," such as the use of mechanized earthmoving equipment or explosives.

The biggest difference between the FS and BLM regulations is that the FS District Ranger has the latitude to determine if proposed operations described in a notice of intent will likely cause significant disturbance of surface resources. If so judged, the District Ranger requires the submission of a plan of operations. In contrast, BLM is satisfied with a notice if the cumulative surface disturbance proposed is less than 5 acres and the area to be disturbed is not within certain special category lands (e.g., designated wilderness areas). The requirements of operators under a plan of operations and the review procedures are almost identical between BLM and FS. A slight distinction is that FS requires operators to "harmonize" operations with scenic values, to the extent practicable, while BLM has no such regulation, *per se*, simply the requirement to prevent unnecessary or undue degradation of the land. BLM is explicit that appropriate cultural resource inventories and threatened and endangered species consultations must occur before plan approval, whereas FS requires operators to take all practicable measures to maintain and protect fisheries and wildlife habitat, but has no regulatory directive with respect to cultural resources.

22. Question: Does the Bureau anticipate completing the withdrawal review required in Section 204(l) of the Federal Land Policy and Management Act by 1991 or will such review be completed sooner?

Answer: The Bureau anticipates completion of the withdrawal review program as required under section 204(l) of FLPMA by 1991. In FY 1984, BLM and the other holding agencies developed mutually approved schedules designed to complete review of other agency withdrawals by 1991.

## BUREAU OF MINES

23. Question: There is a growing concern over the continuing decline of our mining and minerals industry due to a variety of reasons. Clearly, this decline impacts economically not only on the States within which a given industry is situated, but this decline impacts regionally and nationally. Does the Bureau of Mines have the capability to report on the economic consequences of the decline of these industries on a State, regional, and national level? If so, could you begin providing such assessments to this Committee?

Answer: The Bureau of Mines has the capability to perform these types of analyses. Currently the Bureau is directing its analytical expertise to the techniques of regional analyses and is applying these techniques to estimating the economic consequences of declines in the production of selected minerals in New Mexico. It is expected that the New Mexico analysis will be available within 4 to 6 weeks. Future products will depend upon a review of the results of this first analysis.

24. Question: What elements of the Bureau's dust suppression research will be delayed in order to complete higher priority research on control of respirable dusts containing silica?

Answer: The elements of research to be delayed are:

1. Surface mine dust control from drilling and blasting during the removal of overburden.
2. Dust control in minerals processing plants and mills where ore is transformed into product.
3. Dust control in longwall operations which do not contain silica dust in the mine air.

The above elements are not considered as serious a problem as silica in underground mine dust.

25. Question: How much of the decrease in respirable dust research is attributable to the discontinuation of support for the Generic Minerals Technology Center at Penn State and West Virginia Universities?

Answer: The decrease in respirable dust research attributable to the Generic Minerals Technology Center amounts to $1,152,000.

26. Question: Aside from the decision to conclude the contract program at the Idaho National Engineering Laboratory (INEL) with respect to advanced metallic and ceramic materials research for budgetary purposes, would you agree that this is important and should be pursued? How would you rate INEL's work in this area?

Answer: The INEL program in joining advanced metallic and ceramic materials was initiated in FY 1983 because these materials could be substituted for alloy steels and superalloys such as those now made from chromium, cobalt and nickel in certain high-temperature or corrosive applications. The research addressed joining because a) the absence of joining technology is a deterrent to wide application of these new materials, and b) INEL is a recognized leader in welding technology. Such joining research is important, as is research for many other technology areas. INEL'S research approach is technically sound, and INEL's work is of very good quality. However, when it is considered in the context of the program of the Bureau of Mines, the research does not directly address the primary materials problems in the mining, mineral processing, and metallurgical industries, but rather is concerned with applications, such as electronics and advanced aerospace technologies, which are peripheral to the Bureau's mission.

Question: Also, what was the motivation behind terminating contract activities at INEL with respect to the bacterial leaching and plasma systems, aside from the statement that such research would result in a "microimprovement in the technology"?

Answer: The essential motivation behind terminating contract activities at INEL with respect to bacterial leaching was to discontinue research that would likely not produce any major improvements in the technology. Even if the bacterial leaching research were successful, this technology would have limited impact on the broad area of chemical leaching for minerals recovery. For plasma research, the overall probability of success for this technology is uncertain, given the knowledge of the systems. Therefore, the plasma research was not included in the FY 1986 research program.

BUREAU OF RECLAMATION

27. Question: While it is true that we achieve a short term budget cut by stretching out the completion of Bureau of Reclamation projects, there is also a commensurate reduction in income to the Treasury because of the delay of the date when those projects start producing income. And here I would point out that the income should include not only the direct payments by water and power beneficiaries, but also the tax revenues resulting from increased economic activity.

Would it be possible for the Department to calculate the income to the Treasury which will be deferred as a result of the delay in project completion?

Answer: We believe that we could develop a reasonable estimate of the anticipated revenue that would be deferred because of a delay in the completion of projects. We will provide the committee this analysis as soon as possible.

28. Question: In addition to the three starts that the Administration proposes, are there any other projects upon which construction could be initiated during fiscal year 1986?

Answer: Yes, while there are six projects that have been authorized there is only one that could be advanced to the construction stage in fiscal year 1986. That is the Animas-LaPlata Project in New Mexico and Colorado authorized by Public Law 90-537.

Question: What about the Belle Fourche Rehabilitation Project in South Dakota?

Answer: Preconstruction will have advanced sufficiently in fiscal year 1985 that construction contracts could be awarded during fiscal year 1986.

Question: What would be your capability?

Answer: The Unit has the capability of expending $2,400,000 for the rehabilitation of laterals, building construction, land acquisition, design and specifications work, and for the purchase of pipe and equipment for the irrigation district.

29. Question: The President's budget request for the Bureau of Reclamation for FY 1985 proposes a 28 percent reduction in construction, that is a cut from $740M in FY 1985 to $532 million in FY 1986. Such a cut will cause a delay in completion of certain projects. Will you supply for the record a list of the proejcts which will experience delays and how long those delays will be.

Answer: The accompanying table indicates the projects which will be impacted as a result of both FY 1986 and out-year budgetary constraints.

Projects Delayed by Budgetary Constraints

| Project | Duration of Delay |
|---|---|
| Arbuckle Project | 1 year |
| Brantley Project | 1 year |
| Central Arizona Project | 2 years |
| Central Utah Project<br>-Bonneville Unit | 3 years |
| -Jensen Unit | 1 year |
| -Upalco Unit | 2 years |
| Central Valley Project<br>-Sacramento River Division | 1 year |
| Colorado River Front/Work Levee System | 2 years |
| Columbia Basin Project<br>-Irrigation Facilities | 1 year |
| -Third Powerplant | 3 years |
| Dolores Project | 5 years |
| McGee Project | 3 years<br>(access roads delayed) |
| Minidoka Project<br>-Jackson Lake Dam | 1 year |
| Newlands Project | 1 year |
| Pick-Sloan Missouri Basin Program<br>-Garrison Diversion Unit | 1 year |
| -North Loup Division | 1 year |
| -O'Neill Unit | 2 years |

29. (Continued)

| | |
|---|---|
| San Luis Valley, Closed Basin Division | 1 year |
| Title I Division | 1 year |
| Title II Division | |
| -Grand Valley Unit | 1 year |
| -Paradox Valley Unit | 2 years |
| WEB Rural Water Development | 1 year |
| Yakima Fish Passage/Protective Facilities | 1 year |

Question: What is the estimated increase in costs due to delays?

Answer: The technical staff of the Bureau of Reclamation is currently computing the impact of the budgetary reductions in terms of additional costs and in lost benefits. We anticipate providing a report to Congress shortly.

30. Question: There are rather large reductions in funding levels for virtually all of the Bureau's major construction projects in the fiscal year 1986 budget request. Would you supply for the record a list of those projects and related capabilities?

Answer: The accompanying table indicates those construction projects which have been impacted by the 1986 budget reductions and specifies any additional capability available.

30. (Continued)

Impact of Budgetary Constraints
Upon Programs FY 1986-90
FY 1986 Impacts are noted with *

| Region/Project: | Impact of Reduction |
|---|---|
| Pacific Northwest | |
| Columbia Basin Project:<br>Irrigation Facilities- | Outyear budget constraints will delay construction on additional drains and works on wasteways to correct stability problems and provide for emergency routing of water in the event of a flood or canal failure. |
| Third Powerplant- | Outyear budget constraints will delay work to stabilize the riverbank to allow the powerplant to be used for power peaking purposes. |
| Yakima Project: | Outyear budget constraints will delay timely construction of the Prosser Center Fish Ladder and the Roza Fish Screen and Ladder. |
| Minidoka Project:<br>Jackson Lake Dam- | Outyear budget constraints will delay timely completion of work intended to stabilize the the dam by strengthening the embankment and the foundation. Work is exacerbated by short construction season. |
| Mid-Pacific | |
| Central Valley Project:<br>Sacramento River Div. | Outyear budget constraints will delay work on Reach 8b of the Tehama-Colusa Canal and construction of Oat Dam and Reservoir. |
| Newlands Project: | Outyear budget constraints will delay completion of minor repairs to Lahontan Dam and Reservoir and to other facilities such as Tahoe Dam, Derby Diversion Dam, Truckee Canal, and the concrete lining of the lateral system. |

30. (Continued)

### Impact of Budgetary Constraints
### Upon Programs FY 1986-90
### FY 1986 Impacts are noted with *

| Region/Project | Impact of Reduction |
|---|---|
| Lower Colorado | |
| Central Arizona Project: | Outyear budget constraints would delay timely completion of some specific features of the project. |
| Colorado River Front/Work Levee System: | Outyear budget constraints would impact ongoing repairs and armoring of levees on the Colorado River. High flows could cause possible loss of life and property. |
| Title I Division: | *FY 1986 reductions would delay concurrent construction of fish and wildlife mitigation features at Mittry Lake with the rest of project features. |
| Upper Colorado | |
| Title II-Grand Valley: | Outyear budget constraints would delay construction of the West Government Highline Canal. |
| Title II-Paradox Valley: | *FY 1986 budget constraint will delay the design and award of a contract for a deep well and other preconstruction activities. Additional funding of $6.4 million in FY 1986 will ensure that the project will be completed as planned. |
| Central Utah Project: | |
| Bonneville Unit- | Outyear budget constraints will delay timely construction of Jordanelle Dam and Reservoir, rehabilitation of the Duchesne River Area Canal, and completion of road work at Currant Creek Dam and Reservoir. |
| Jensen Unit- | Outyear budget constraints will delay timely completion of project distribution and drainage systems. |

30. (Continued)

### Impact of Budgetary Constraints
### Upon Programs FY 1986-90
### FY 1986 Impacts are noted with *

| Region/Project | Impact of Reduction |
|---|---|
| Upper Colorado | |
| Central Utah Project:<br>Upalco Unit | Outyear budget constraints will delay timely completion of the Moon Lake Road Improvement. This is intended to be the primary access to the proposed Taskeech Reservoir. |
| Dolores Project: | *FY 1986 reductions will delay the timely construction of Pleasant View-Ruin Canyon-Hovenweep Pumping Plants and Laterals, McPhee Dam Powerplant, Ruin Canyon Substation, and the Dolores-Korwood-May Canyon and Williams Draw Roads. Additional funding of $11.3 million will ensure timely completion. |
| Southwest | |
| Arburckle Project: | Outyear budget constraints will delay timely completion of Sulphur Pumping Plant and Pipeline. |
| Brantley Project: | Outyear budget constraints will delay timely completion of recreational facilities associated with Brantley Dam and Reservoir. |
| McGee Creek Project: | *FY 1986 budget reductions will delay paving of access roads. |
| San Luis Valley, Closed Basin: | Outyear budget constraints will delay timely completion of stage 4 and stage 5 canals and laterals. This project is designed to salvage 101,000 AF of water |
| Upper Missouri: | |
| Pick-Sloan Missouri Basin Program:<br>Garrison Diversion Unit- | Outyear budget constraints will delay completion of project. Because of the uncertainty associated with the implementation of some aspects of the Garrison Diversion Unit Commission's recommended plan, which are beyond the scope of the authorized project, the features which would be impacted and any associated delays are not specifically known at present. |

30. (Continued)

Impact of Budgetary Constraints
Upon Programs FY 1986-90
FY 1986 Impacts are noted with *

| Region/Project | Impact of Reduction |
|---|---|
| Upper Missouri | |
| WEB Rural Water Development: | *FY 1986 reductions will consequently timely design and construction of water distribution systems to provide municipal and industrial supplies to rural municipalities. |
| Lower Missouri | |
| Pick-Sloan Missouri Program: | |
| O'Neill Unit- | Outyear budget constraints will delay the timely initiation of project construction. Consequently, initial contract award for construction of the dam and reservoir will be delayed. |
| North Loup Division- | Outyear budget constraints will delay timely award of contracts to construct and complete the Scotia System, and to construct Davis Creek Dam, and the Fullerton and Elba Systems. |

New Construction Starts

31. Question: Funds would be included in the President's request for the Bureau of Reclamation for fiscal year 1986 to initiate construction on three projects: Headgate Rock, Buffalo Bill enlargement and Hoover Dam uprating. What levels of non-Federal financing during construction are anticipated for each project?

Answer:

| Project | TEC ($ million) | Federal ($ million) | Non-Federal ($ million) |
|---|---|---|---|
| Boulder Canyon | $ 34.2 | $ 34.2 | [1] |
| Buffalo Bill | 47.0 | 119.5 | $ 47.0 |
| Headgate Rock | 58.1 | 58.1 | [2] |

[1] Total cost of this work will be repaid with interest.

[2] Indian facility and is authorized under the provisions of the Synder Act. The project will result in savings by producing project power and eliminate need to purchase more expensive commercial power.

32. Question: Last Congress, during consideration of legislation to raise the ceiling on appropriations for the Bureau of Reclamation's Small Reclamation Projects loan program, the Administration indicated that the value of approved loans and applications was close to the authorized ceiling. Would you provide for the record an up-date on the status of the program?

Answer: The following table shows the current status of the Small Reclamation Projects loan program:

| | |
|---|---|
| Authorized appropriation ceiling (P.L. 84-984, as amended) | $600 |
| Funds appropriated by Congress through FY 1985 | 432.8 |
| Proposed new starts in FY 1986 and completion of on-going construction | 119.8 |
| Subtotal - Appropriations made and required | 552.6 |
| Currently approved by Secretary, but not started | 27.6 |
| Subtotal | 580.2 |
| Loan applications under review, but not currently approved | 104.7 |

33-34. Question: One of the problems with the Small Reclamation Projects loan program is how it is perceived. Because of the way that the program was established, off-setting receipts or repayment of the loans are never credited against appropriations -- they are returned directly to the Treasury.

In anticipation of hearings later this year on legislation to amend the Small Reclamation Projects Act, would you consider the feasibility of revising the program to provide for a self-financing function -- that is, future loans would be financed from the repayment of existing loans? If you have any views on that concept at this time would you supply them for the record?

Answer: Loan repayments are deposited into the Reclamation Fund, not the General Treasury, from which the Loan Program appropriation is derived. We have concerns about a revolving fund concept because current program receipts will not support the current level of the program.

35. Question: Last Congress, there was passed and signed into law amendments to the Colorado River Basin Salinity Control Act. The amendments authorized additional activities as well as increased levels of cost sharing or reimbursability for the salinity control efforts. Would you supply for the record the level of funding requested for the Paradox Valley and Grand Valley Units of the Salinity Control Program and also the capability that the Bureau would have for these two units in fiscal year 1986? If the Congress appropriated additional funds for these two units, what further work could be undertaken?

Answer: The Bureau requested $1,782,000 for the Paradox Valley Unit. In addition, we have an additional capability of $3,600,000 that would be used to award and complete construction of the first injection well. Work to be accomplished includes a test of the injection well and the procurement of injection tubing. On the Grand Valley Unit the Bureau asked for $3,505,000 in the 1986 budget. An additional capabability of $1,150,000 could be used to award a contract on the West Government Highline Canal. Work to be accomplished includes lining of eight miles of canal, threee check and wasteway structures, replacement of Mack Wash Flume with a siphon, addition of one centerline check, and then lateral turnouts and 13 farm turnouts would be replaced.

36. Question: The Department of the Interior's press release for the Bureau or Reclamation's program for fiscal year 1986, was included the statement that, "Reclamation follows the Presidential policy for water project financing and cost-sharing objectives. Project beneficiaries will bear a part of the cost of financing new project development; their share is worked out on a project-by-project basis."

The term "will" is used in regard to project beneficiaries financing new project development. However, there is a need to define the difference between the existing requirements under law for project repayment and a requirement for contributions during construction.

Answer: We interpret this question as requesting a definition of "cost sharing" and "up-front financing." The Bureau has "cost shared" water resource projects ever since its inception. The cost sharing by project beneficiaries has usually been in the form of a commitment to repay a portion of the costs of constructing, operating, and maintaining a project--normally through the auspices of a water service or repayment contract providing for the return of costs over a number of years. The legal parameters defining the repayment requirements for Reclamation benefits are fairly well defined.

Most irrigation costs are repaid to the United States with no interest. An economic analysis is made of the water users' financial capacity to repay the United States prior to construction of a project or furnishing a loan. For the general Reclamation program, hydropower revenues are frequently available to assist in the repayment of the irrigation costs which are beyond the water users' ability to repay. Costs associated with municipal and industrial water service, and hydropower production and transmission, are repaid with interest at rates established by law. Water rates and repayment schedules can be established with some flexibility in consideration of economic and financial conditions impacting the project beneficiaries.

When referring to non-Federal contributions towards water project development, we normally use the term "up-front financing." This simply implies that the non-Federal participant, together with the Bureau of Reclamation, will simultaneously fund the planning, design, and construction of the project. It is our policy that such financing will be negotiated on a case-by-case basis. We do not support the concept of establishing fixed percentage thresholds of non-Federal financing as this seems to us to be contrary to the intent of President Reagan's January 24, 1984, policy letter to Senator Laxalt. Such a fixed target removes much of the equity considerations from the financing process and may tend to unduly favor those interests who least need Federal support over those entities who need it most. While we don't absolutely require non-Federal financing in every situation, we believe that it makes good economic, financial, and political sense for our non-Federal partners to have an equity interest in Reclamation projects.

MINERALS MANAGEMENT SERVICE

37. Question: What level of fiscal year 1986 funding will be devoted to the examination of possible strategic and critical mineral leasing and resource evaluation activities on the OCS and in the Exclusive Economic Zones?

Answer: In FY the 1986 Minerals Management Service funding for strategic and critical mineral activities on the OCS and in the Exclusive Economic Zones will amount to $2.0 million. FY 1986 efforts will be targeted toward evaluation of mineral resources, such as Arctic sand and gravel and Pacific Ocean cobalt crusts, to determine whether future lease sales of these resources are appropriate. Additional efforts will be directed toward investigating and assessing the occurrence, distribution and development potential of minerals other than oil, gas, and sulphur within the Exclusive Economic Zone. There are no current plans to offer mineral leases in FY 1986.

Question: What is the status of the Gorda Ridge polymetallic sulfides project off the coasts of Oregon and California?

Answer: The Minerals Management Service prepared the following status report: On December 6, 1982, a working group on OCS nonenergy minerals was formally established in MMS to coordinate the Secretary's directives to proceed with development of an Outer Continental Shelf Hard Minerals Leasing Program. A notice of jurisdiction for the Gorda Ridge area was published in the Federal Register on December 8, and a Notice of Intent to prepare a draft Environmental Impact Statement (EIS) on leasing in the area was published on March 28, 1983. At the end of December 1983, the draft EIS for the proposed Gorda Ridge sale was made available. On February 28, 1984, following public hearings on the draft EIS, and together with the representatives of the States of California and Oregon, MMS established a joint State-Federal Working Group to consider the economic, engineering, and environmental aspects of the development of polymetallic sulfides in the Gorda Ridge area. In June 1984, MMS established a cooperative agreement with the State of Oregon to provide $860,000 in FY 1984-1985 to prepare a revised draft EIS for the Gorda Ridge area according to the guidelines recommended by the Working Group. The draft EIS should be completed in late FY 1986. Funding of approximately $500,000 will be used to assess the resource potential of the California deposits in FY 1985.

Question: What is the status of the Mid-Pacific seamounts cobalt crusts project?

Answer: I am informed that to date MMS has provided $1.8 million to the State of Hawaii for resource and environmental studies of these deposits. In January 1984 a joint State-Federal Manganese crust task force was formed to oversee publication of an ocean mining environmental impact statement dealing with: resource assessment; regulatory compliance; coastal and socio-economic impacts; and biological impacts. A draft EIS is scheduled to be completed by the fall of 1985. It is estimated that an additional $500,000 will be needed to complete the final EIS.

38. **Question:** Would you provide for the record a detailed breakdown of the "relevant onshore mineral leasing costs of the Minerals Management Service, the Bureau of Land Management, and the Forest Service" that the Administration proposed be deducted from Federal onshore mineral leasing receipts before distribution to the Treasury and respective States?

Answer: The following chart details the derivation of the amounts in the cost sharing proposal:

The following chart details the derivation of amounts for cost sharing:

| | Estimate (millions) |
|---|---|
| MINERALS MANAGEMENT SERVICE | |
| Royalty Management<br>(FY 1986 Royalty Management Budget Estimate X .74) = ($37.6 X .74) [1] | $ 27.8 |
| MMS General Administration<br>$\left(\frac{\text{RMP FTE}}{\text{MMS FTE - Admin. FTE}}\right)$(X Administrative Budget Estimate (X .74)<br>$\left(\frac{560}{2000-284}\right)$($22.3)(.74) | 5.4 |
| Subtotal, MMS | $ 33.2 |
| BUREAU OF LAND MANAGEMENT [2] | |
| Oil and Gas | $ 41 |
| Geothermal | 3 |
| Coal | 18 |
| Nonenergy | 4 |
| Program Subtotal | $ 66 |
| BLM General Administration | |
| Program Subtotal x normal overhead rate of 18% | 11.9 |
| Subtotal, BLM | $ 77.9 |
| FOREST SERVICE | |
| Leasable Minerals (based on FY 1986 Forest Service Budget Estimate) | 14.1 |
| Total, Cost Sharing | $125.2 |

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[1] Seventy-four percent of all producing leases are Federal onshore.

[2] BLM program amounts based on FY 1986 estimate less services provided to Indian leases.

The rationale for deducting these costs is that the direct beneficiaries of the Federal onshore mineral leasing program should equitably share in funding the program, rather than the costs being borne by the general public as has previously been the case.

39. Question: How much is saved by phasing out the Royalty-In-Kind Program.

Answer: According to the Minerals Management Service, during FY 1986, $320,000 and 10 FTE will be saved as a result of the phase out of the Royalty-In-Kind (RIK) Program. The remaining resources of $250,000 and 4 FTE will continue to be required in the budget through FY 1988 when all RIK contracts have been completed and closed out through an auditing and reconciliation process.

40. Question: You have proposed appropriation language that would preclude the Department from entering into new agreements to accept payment of royalties "in kind" unless you determine that such agreements are necessary due to a national emergency. Could you provide the Committee with examples of conditions that would trigger such a determination, short of a declaration of war?

Answer: In the appropriation language, the term "national emergency" is used to denote any event or circumstance that would threaten the security or economic stability of the Nation. Clearly, a declaration of war would fall into this category as would international oil disruptions or other events that would endanger the supply of energy resources to the Nation. It is the intent of the language that the Secretary would retain the discretion to propose such a declaration should severe economic conditions or petroleum resource availability threaten the viability of the Nation's small refiners.

41. Question: What are the financial impacts on industry of acquiring geologic and geophysical data as a condition of a permit issued by MMS in the OCS, as such an acquisition would be retroactive in its application?

Answer: I am informed by MMS that industry now collects geologic and geophysical data under prelease permits issued by MMS, and this would not change under the Department proposal. Currently, permittees are reimbursed for a portion of the costs of processing and reproducing the geologic and geophysical data requested by MMS. However, lessees are only reimbursed for their data reproduction costs. Under the proposed change in the FY 1986 appropriation language both permittees and lessees will be reimbursed only for the reasonable cost of reproducing geologic and geophysical data if it is in the form and manner normally used by the company. If MMS requests the data to be processed in a form or manner other than that normally used by the permittee or lessee, MMS will pay the reasonable costs attributable to this processing and reproduction. Since industry will continue to collect these data whether or not the Government pays processing costs, the only financial impact would be from the discontinuation of the Government reimbursement portion. However, for the permittee the total cost of processing the data would still be covered by the other private purchasers of the data.

42. Question: When do you anticipate making a decision on how to proceed with modifications to your current computer system for royalty collection and distribution? Can the Committee expect an amendment to the Department's budget request should you decide to modify your current computer system?

Answer: A Departmental team is reviewing the Royalty Management Program and the report by outside consultants and Congress to develop options and recommendations for the Department. During the March-April timeframe, a decision will be reached on how to proceed. Any necessary funding decisions will be made at that time.

43. Question: Can you foresee a time when the Department will not be paying interest to States and Indians as a consequence of not disbursing leasing receipts by the dates prescribed by the Federal Oil and Gas Royalty Management Act. Should the due dates for disbursing such receipts be extended? If so, what timeframe would you recommend?

Answer: It is likely that the Department will be paying some amount of interest to States and Indians into the foreseeable future. The Auditing and Financial System (AFS) relies on people to maintain it and depends on other agencies and royalty payors to provide the correct input data. In the case of this system (as well as any other large automated system), there will always exist a set of conditions which cause errors to occur and hence late payment interest to accrue. Because of the dependencies noted above, it is doubtful that the error rate could be reduced below 5 percent.

In addition to the error rate problem, the Federal Oil and Gas Royalty Management Act (FOGRMA) requires that royalty funds be deposited into the appropriate Indian accounts at the earliest practicable date, but in no case later than the last business day of the month in which such funds are received. Indian cash is transferred to the Bureau of Indian Affairs (BIA) as soon as practicable (normally within 2 to 4 working days) after it is collected. End of the month collections will normally be subjected to interest calculations, because it takes MMS several days to transfer funds. In this case, the transfer to BIA could not have been made until the beginning of the next month.

At this time, MMS is examining the reasons contributing to the total late payment interest liability to States and Indians. Changes to FOGRMA are one of several possible actions which could reduce late payment interest in the future. However, departmental legislative changes have not been recommended at this time, pending further review of current capabilities and systems improvements.

OFFICE OF SURFACE MINING

44. Question: Under Technical Services and Research on page 3 of the OSM Budget Justifications, you noted that of the $1.5 million increase in funds in Federal Regulatory programs, some of the funds would go to Tennessee and several proposed initiatives. What are these proposed initiatives?

Answer: In addition to administering the Federal program, OSM will assist the State in developing skills in permitting required for the resumption of primacy. This assistance will be delivered through consultation with State personnel and through training.

45. Question: Can you give me a detailed breakdown of exactly how the $4.8 million that OSM is requesting will be obligated in the Fiscal Year 1985 supplemental appropriation?

Answer: Of the total, $2.6 million is for administration of the Federal regulatory program in Tennessee, including $400,000 in Program Operations and Inspection and $2.2 million in Technical Services and Research. The remaining $2.2 million is included in Program Operations and Inspection to enhance systems for the assessment and collection of civil penalties.

46. Question: How will a $46.5 million reduction in State Reclamation Program Grants "enable better long term management of program resources?"

Answer: According to OSM, in recent years, the large unappropriated balance in the Abandoned Mine Reclamation Fund's has rapidly declined due to high appropriation levels and a no-growth receipt pattern. Appropriations have steadily increased to almost $300 million, while receipts have averaged slightly over $200 million. As a result, a more conservative funding approach for the AML program is needed to assure States of a long term steady level of support and to avoid a sudden drop in funding that would disrupt State program management. Maintaining or increasing the current level would soon create a cash flow problem for the program. The unappropriated balance would be insufficient to support the request, and current year collections would be needed to make up the difference. Program obligations would have to be carefully controlled so that they did not exceed the amount actually available in the Fund. Consequently, the program would be "living from hand to mouth." A sharp decline in grants would be virtually inevitable, and many State programs would be supported on a receipts-only basis that would require a reduction in staff and in the level of construction activity. By contrast, the 1986 proposal conserves an amount that would allow for a steady and predictable level of support for States, and also provides a reserve should receipts prove less than projections.

47. Question: OSM is proposing a $3.0 million increase in Federal Reclamation Projects to carry out reclamation projects on Tribal lands and reduce the backlog of potential projects. What is the backlog?

Answer: According to OSM, the $3 million increase is for projects on both Tribal lands and in nonprogram States. This effort has been funded at the $1 million level for the last two years. The inventory effort to identify projects on Tribal lands and in nonprogram States is nearing completion. To date, this inventory effort has identified projects on the Hopi, Crow, Navajo, Zuni and other Indian lands as well as projects in the nonprogram States of Michigan, Georgia, North Carolina, Tennessee, Arizona, California, Idaho, Nevada, Oregon, South Dakota, and Washington. A funding level of $4 million will allow OSM to begin reclamation of identified projects in a timely manner.

48. Question: What amount was taken from Small Operator Assistance Payments from 1982 - 1985 to assist functions in Oklahoma and Tennessee?

Answer: According to OSM, in 1984, $1,535,000 was transferred from the Small Operator Assistance Payments (SOAP) activity to provide support for Federal regulatory activities in Tennessee and Oklahoma, pursuant to the Secretary's Section 102 transfer authority. No other funds have been transferred from SOAP for this purpose. However, $2.6 million has been transferred from the State Reclamation Program Grants activity this year, also under Section 102, to provide support for Federal activities in Tennessee; OSM's 1985 supplemental appropriation request includes $2.6 million to replenish the State Reclamation Program Grants activity.

49. Question: Section 504 of SMCRA requires that a Federal program be implemented in a coal-producing or coal exploration State which does not submit a regulatory program or fails to have its program approved. Why will OSM continue to implement a Federal program in Idaho?

Answer: Mr. Ward advise me that Idaho contains coal resources that may be subject to development in the future, but which are not currently being mined. Of the States with Federal programs, only Georgia and Washington are currently producing coal. OSM promulgated Federal programs for seven other States, including Idaho, in order to establish a regulatory framework in which any future mining of their known coal resources could legally be conducted. The absence of an approved State or Federal program under SMCRA would otherwise have impeded any such future mining. The only OSM implementation costs or activity associated with these seven programs thus far has been to monitor occasional coal exploration activity in Oregon. We do not anticipate any changes to this situation in the near future, but will continue to maintain Federal program availability in these States to provide a regulatory system for any coal mining proposals.

50. Question: With respect to OSM's Indian Lands Program, the Fiscal Year 1986 Budget justification on page 39 states "OSM is the sole regulatory authority on Indian lands, until special legislation is enacted by Congress." Does the Department intend to submit legislation to the Committee for this purpose?

Answer: I have been advised that the Department submitted recommendations on the matter to Congress in February 1984. These recommendations indicated the Department's belief that Tribes could afford the statutory means by which to achieve primacy. The Department is not currently planning on any further submission.

51. Question: OSM is proposing a change in language and authority in the form of an indefinite appropriation making estimated forfeitures available for expenditure which will enable OSM to complete reclamation of land for which bonds have been forfeited. Why wasn't this proposed change to the statute proposed to this committee?

Answer: The proposal is only a technical change and does not substantively revise the Act. It allows OSM to secure the funds needed to complete reclamation on lands for which it is the regulatory authority, in cases where bond forfeitures occur. At present, forfeited amounts are deposited in the General Fund of the Treasury and cannot be spent without an appropriation. The proposal therefore will not change OSM's responsibilities, but instead provide an appropriation to reclaim these sites consistent with the Act's requirements.

52. Question: OSM is proposing the continued implementation of Federal programs in Georgia, Idaho, Massachusetts, Michigan, North Carolina, Oregon, Rhode Island, South Dakota and Washington. What work needs to be done in these States specifically with respect to reclamation as it pertains to OSM. What is the federal cost to implement these programs?

Answer: Only Georgia and Washington among these nine States are currently producing coal. OSM promulgated Federal programs for the other seven in order to establish a regulatory framework in which any future mining of their known coal resources could legally be conducted. The absence of an approved State or Federal program under SMCRA would otherwise have impeded any such future mining. The only OSM implementation costs or activity associated with these seven programs thus far has been to monitor occasional coal exploration activity in Oregon. We do not anticipate any changes to this situation in the near future. The proposed 1986 budget for these programs is $286,000 exclusive of any reclamation projects that may be undertaken.

53. Question: What is the Federal cost to the newly created Branch of Compliance? What are its functions? Which office previously maintained the workload the Branch of Compliance will supposedly replace?

Answer: OSM's Fiscal Year 1986 budget includes $2,018,600 for the Branch of Compliance. Its functions are (1) to review existing and future enforcement cases for the appropriateness of further alternative enforcement actions; and (2) establish and maintain a system to implement Section 510(c) of the Act, which prohibits the issuance of permits to persons currently in violation of the Act or of certain other environmental laws and regulations. The Compliance Branch does not replace any other office. The current efforts of this office are an increase from previously budgeted levels.

54. Question: On page 68 of the OSM Budget justifications for Fiscal Year 1986, under State Reclamation Program Grants, the Administration noted the $46,540,000 decrease in the Abandoned Mine Reclamation Fund "reflects the need to conserve available Fund resources and thus assure an orderly program structure, as well as reduced needs on the part of States, whose obligation rates do not indicate a need for funding comparable to 1985." On page 80, OSM writes "if the current practice of funding State programs, essentially at the levels requested by the States, was continued in 1986, a request of slightly over $300 million would be required." Would you please supply the Committee with a detailed breakdown of the $46.5 million reduction in the Abandoned Mine Reclamation fund, State Program Grants on a state-by-state basis.

Answer: Individual State amounts for 1986 will ultimately be determined by factors such as 1985 revenues (by State) and evaluation of the actual grant application requests. As indicated in the response to the following question, the States are expected to carry substantial unobligated balances of Fiscal Year 1984 and 1985 grants into the next fiscal year.

55. Question: OSM has mentioned in the Fiscal Year 1986 justifications that the proposed level for the Stateside Reclamation Grants Program will not adversely impact State programs. How did OSM arrive at this conclusion?

Answer: According to OSM, State obligation rates indicate that the vast majority of Fiscal Year 1984 construction grant funds have not been obligated. Once 1985 funds are awarded from the available appropriation—the highest level ever enacted for grants—the backlog of unobligated funds will increase further. At any given time, States can only administer a certain level of construction activity, which will be at different stages depending upon the time at which projects were funded; construction obligations are usually not incurred until the second or third year after the grant is made. Consequently, the requested level will not adversely effect the States. In contrast, by assuring better long term management of the AML Fund's resources, it will have a beneficial effect.

56. Question: In Fiscal Year 1986, the States of Virginia, Kentucky, West Virginia and Wyoming will all experience deep cuts in Reclamation Stateside Grants, while Pennsylvania, and Ohio are scheduled to receive large increases in their grants. Would you please provide to the Committee with the rationale behind these allocation decisions?

Answer: I am informed that OSM has not proposed any such increases or decreases. State grant amounts are not determined until enactment of the appropriation and submittal of the grant application.

## U.S. GEOLOGICAL SURVEY

57. Question The U.S.G.S. has budgeted $34.6 million for FY 1986 in the area of earthquake hazards reduction. Could you provide a detailed break-down on where and how much will be utilized in this effort?

Answer: The $34.6 million would be distributed among the five elements of the Earthquake Hazards Reduction Program:

| | |
|---|---|
| REGIONAL MONITORING AND EARTHQUAKE POTENTIAL STUDIES | |
| Regional seismic monitoring<br>Principally in California, Oregon, Washington, Alaska, Hawaii, Nevada, and Utah; also in Idaho, New Mexico, Missouri, Tennessee, Arkansas, Kentucky, Illinois, South Carolina, New York, New Jersey, Vermont. | $ 3,960 |
| Source zone characteristics<br>Principally in California, Oregon, Washington, Alaska, Hawaii, Nevada, and Utah; also in Idaho, New Mexico, Missouri, Tennessee, Arkansas, Kentucky, Illinois, North Carolina, Virginia, South Carolina, New York, New Jersey, Vermont, Maine. | 2,474 |
| Earthquake potential<br>Principally in California, Nevada, Utah. | 1,559 |
| SUBTOTAL | $ 7,993 |
| EARTHQUAKE PREDICTION RESEARCH | |
| Precursor evaluation and prediction methodology<br>Principally in California and Alaska; also in Nevada. | $ 4,736 |
| Earthquake prediction experiments<br>Principally in California and Alaska. | 6,174 |
| Theoretical, laboratory, and fault zone studies<br>Principally in California. | 1,771 |
| Induced seismicity<br>Principally in South Carolina, New Mexico. | 549 |
| SUBTOTAL | $13,230 |

57. (Continued)

| | |
|---|---|
| REGIONAL EARTHQUAKE HAZARDS ASSESSMENTS | |
| National hazards assessment | $ 531 |
| Hazards assessments, Western U.S.<br>Principally in California, Utah; also Alaska, Colorado, New Mexico, Idaho, Nevada, Hawaii. | 4,600 |
| Hazards assessments, Eastern U.S.<br>South Carolina, New York, New Jersey, Maine | 662 |
| SUBTOTAL | $ 5,793 |
| DATA AND INFORMATION SERVICES | |
| Support and maintenance of Global Seismographic network<br>Headquarters located in Colorado; worldwide network, with U.S. stations in Massachusetts, New York, Pennsylvania, District of Columbia, Virginia, Georgia, Missouri, Texas New Mexico, Arizona, Colorado, South Dakota, Montana, Utah, Washington, Oregon, California, Alaska, Hawaii, Puerto Rico. | $ 2,433 |
| Provision of seismological data and information services<br>National Earthquake Information Service located in Colorado; distributes seismologic information received from U.S. and worldwide stations. | 2,049 |
| SUBTOTAL | $ 4,482 |
| ENGINEERING SEISMOLOGY | |
| Strong-ground-motion data acquisition and management<br>Accelerographs are deployed in practically all 50 States, Puerto Rico, the Virgin Islands, and Guam; strong motion data are archived at the U.S. Geological Survey Western Region Headquarters, California. | $ 1,966 |
| Strong-ground-motion analysis and theory<br>Primarily in California. | 1,139 |
| SUBTOTAL | $ 3,105 |
| TOTAL | $34,603 |

58. Question: The Earthquake Hazards Reduction Program receives support from Universities, State agencies, and private companies. What types of support do these entities offer USGS? Does USGS fund any of these complementary activities?

Answer: The USGS Earthquake Hazards Reduction Program receives no support from Universities, State agencies, and private companies. Approximately 25 percent of the USGS earthquake appropriation is directed to support research and earthquake hazard mitigation studies and activities at Universities, State Agencies, and private companies. Many of these activities are complimented with support from these non-Federal groups and other Federal agencies, primarily the National Science Foundation.

Question: Who are the Universities, State agencies, and private companies that are involved with this program?

Answer: In FY 1985, the Earthquake Hazards Reduction Program is supporting extramural scientific investigations in the following institutions:

University of Arizona, Tucson, Arizona
Boston College, Chestnut Hill, Massachusetts
British Geological Survey, Edinburgh, Scotland
Brown University, Providence, Rhode Island
California Institute of Technology, Pasadena, California
California Division of Mines and Geology, Sacramento, California
University of California, Berkeley, California
University of California, Los Angeles, California
University of California, San Diego, California
University of California, Santa Barbara, California
University of California, Santa Cruz, California
Cambridge University, Cambridge, England
Carnegie Institution of Washington, Washington, D.C.
University of Cincinnati, Cincinnati, Ohio
University of Colorado, Boulder, Colorado
Cornell University, Ithaca, New York
Dames and Moore, Salt Lake City, Utah
Foothill-De Anza Community College, Los Altos, California
Georgia Institute of Technology, Atlanta, Georgia
Harvard University, Cambridge, Massachusetts
Humbolt State University, Arcata, California
University of Idaho, Moscow, Idaho
Lamar-Merifield Geologists, Santa Monica, California
Lamont-Doherty Geological Observatory of Columbia University,
  Palisades, New York
Lawrence Livermore Laboratory, Livermore, California
University of Liverpool, Liverpool, England
University of Southern Maine, Portland, Maine
Massachusetts Institute of Technology, Cambridge, Massachusetts
University of Nevada, Reno, Nevada
State University of New York, Stony Brook, New York
Northwestern University, Evanston, Illinois
Oregon State University, Corvallis, Oregon
Pennsylvania State University, University Park, Pennsylvania

58. (Continued)

University of Queensland, Queensland, Australia
Redwood Research, Inc., Redwood City, California
Roundout Associates, Inc., Stone Ridge, New York
Saint Louis University, St. Louis, Missouri
San Diego State University, San Diego, California
San Francisco State University, San Francisco, California
S-Cubed, La Jolla, California
University of South Carolina, Columbia, South Carolina
University of Southern California, Los Angeles, California
Stanford University, Stanford, California
Texas A&M University, College Station, Texas
University of Texas Austin, Texas
Utah Geological and Mineral Survey, Salt Lake City, Utah
Utah State University, Logan, Utah
University of Utah, Salt Lake City, Utah
University of Washington, Seattle, Washington
J. H. Wiggins Company, Redondo Beach, California
University of Wisconsin, Madison, Wisconsin
Woodward-Clyde Consultants, Inc., Santa Ana, California
Woodward-Clyde Consultants, Inc., Walnut Creek, California

59. Question: There are no funds in the FY 1986 Budget for transition or closing the accounts of the Trust Territory although the Committee has previously been assured that this would be done. Last year in the hearings on the Compact, I specifically asked how these items would be funded. Assistant Secretary Montoya responded that an audit was underway and that "These will be programmed in the 1986 budget." Mr. Montoya went on to provide an estimate of $33 million.

Where are these funds in the budget?

Answer: These funds are not in the budget. Assistant Secretary Montoya's statement last year was optimistic and was based on several assumptions, including the completion of an audit and possible resolution of legal claims against the Trust Territory Government. These events have not taken place. The deficit came about many years ago because of inadequate recordkeeping and a perceived need by the Trust Territory Government, during that period, to have maximum flexibility and be able to shift funds easily from one account to another. This has made it very difficult to audit the deficit and clearly define the shortfall. The legal claims are for the most part dependent on the actions of the claimants and the Courts and are out of the Department's control.

Question: Why did you not clarify the record last year?

Answer: At the time of our hearing, we were hopeful that some of these transition items would be resolved.

60. Question: If the Administration is not proposing piecemeal termination what is the basis for funding other than through Interior pursuant to the Executive Order?

Answer: The Administration is considering the contingent possibility of partial termination and the changes in the Executive Order that might be required as a result.

61. Question: Do you believe that the Department of State has more experience and greater competence in administering financial assistance to the governments of the Trust Territory?

If not, why is funding in the Department of State?

If yes, why have you not also transferred responsibility for Palau and the Northern Marianas to take advantage of their great competence and experience?

Answer: I am fully confident in the ability of the Department of the Interior to administer programs applicable to territorial governments. However, in 1981, a decision was made by the Administration that the new Freely Associated States would be under the administrative supervision of an interagency group which includes the Departments of State and Interior, as well as representatives from the Defense Department, with support staff attached to the State Department.

## TRUST TERRITORY QUESTIONS

62. Question: The FY '86 budget for the Trust Territory eliminates funding for the Marshall Islands and the Federated States of Micronesia while retaining funding only for Palau and a reduced High Commissioner's Office. The Department of State budget submission includes $299 + million for implementation of the Compact.

Last year in our hearings on the Compact, I specifically asked whether the Administration would agree to implement the Compact prior to termination. Ambassador Zeder responded that the Administration opposed such an idea. I also asked whether the Administration comtemplated piecemeal termination of the Trusteeship and was told that the Administration planned on single termination for all jurisdictions. Something has changed.

What has changed, why has it changed, and why didn't you inform the Committee or attempt to clarify the record last year?

Answer: I have been informed by the Office for Micronesian Status Negotiations that they still believe the Compact should enter into force simultaneous with termination of the Trusteeship Agreement and not before. The Administration still prefers a termination of the Trusteeship Agreement that applies at one time to all components of the Trust Territory. The Administration hopes that the Compact can be enacted by Congress sufficiently early to allow for an effective date of October 1, but the United States Government has not formally agreed to that date pursuant to Compact Section 411. We continue to prefer that Palau be included in the termination of the Trusteeship Agreement and implementation of the Compact. On the contingency that Palau may not be able to resolve its constitutional issue in time to be included in an October 1, 1985 implementation, we have begun consideration of partial termination as an alternative. On March 12,1985, Ambassador Harvey Feldman, Political Affairs Representative for the United States UN Mission, and Assistant Secretary Montoya briefed Chairman McClure on the discussions currently taking place within the Administration on the issue of partial termination.

Question: How many other answers which the Committee received last year have changed?

Answer: I have been informed by the Office for Micronesian Status Negotiations that no other answers have changed, other than with respect to further executive-legislative discussions and to the amplifications contained in these answers.

62. (Continued)

Question: Does the Administration plan to implement the Compact, if enacted, on October 1, 1985 whether or not the Trusteeship has terminated?

Answer: I have been informed by the Office for Micronesian Status Negotiations that their intent is that the effective date of the Compact be coincident with the termination of the Trusteeship Agreement. If that cannot be accomplished for all of the Micronesian entities, the Administration may have to consider partial termination.

Question: Executive Order 11021 assigns responsibility for the Trust Territory to the Secretary of the Interior. Has the Executive Order been changed? Do you plan on changing it and do you plan to consult with the Congress? Who do you plan to consult with and when?

Answer: Executive Order 11021 has not been changed. The Secretary of the Interior continues to exercise full administrative authority over the Trust Territory of the Pacific Islands. The Secretary of State is consulted on those matters related to the foreign policy of the United States.

It is not known at this time what revisions, if any, will be made to Executive Order 11021 in order to implement the Compact of Free Association, after the approval by the Congress. If revisions are determined necessary, this Committee and other appropriate committees of the Congress will be consulted before any action is taken.

Question: If the Trusteeship has not terminated and the Executive Order not been modified prior to FY'86, how do you plan to discharge your responsibilities under this budget?

Answer: We hope that Congress and the Administration will have taken those actions necessary to fully implement the Compact of Free Association prior to FY 1986. If these necessary actions are not completed, Executive Order 11021 would continue in effect, and we may be required to seek appropriate revisions in the Administration's budget.

Question: The Interior budget proposes reductions in the budget for the High Commissioner yet a recent article in the Pacific Daily News quotes Ambassador Zeder as stating that there would be no -

62. (Continued)

curtailment until approved by the Inter Agency Group which has responsibility for the Trust Territory. When was Executive Order 11021 changed to remove responsibility from the Secretary of the Interior? Does the budget submission or Ambassador Zeder's comments reflect the position of the Administration on the phase down of the High Commissioner?

Answer: Executive Order 11021 has not been changed. The Secretary of the Interior continues to exercise full administrative authority over the Trust Territory of the Pacific Islands with proper consultation with the Secretary of State on those matters related to the foreign policy of the United States, and with the President's Personal Representative on Micronesian Status Negotiations on those issues directly related to future political status.

The Department of the Interior's FY 1986 budget request, as approved by the Office of Management and Budget and submitted to Congress by the President, accurately reflects the continued phase down of the operations of the Office of the High Commissioner in anticipation of approval by Congress of the Compact of Free Association.

Question: If the Compact is not enacted and implemented by October 1, 1985 what happens to the Marshalls and FSM?

Answer: If the Compact is not implemented by October 1, 1985, the FY 1986 budget can be amended to transfer sufficient funds from the State Department to the Department of the Interior to provide for continuing government operations in the FSM and the Marshall Islands.

Question: Last year you included contingency money in Interior's budget for the Marshalls and FSM and indicated that a supplemental would be submitted for the Compact. Why have you changed your mind? How much needs to be included if the Compact is not implemented?

Answer: This year there is a reasonable expectation that Congress has sufficient time to conclude its legislative process and approve the Compact before the beginning of fiscal year 1986. We did not believe this to be the case last year, thus the contingency funding. If the Compact is not implemented and the FSM and the Marshalls are provided level operations funding--consistent with the Administration's policy--approximately $54.7 million would be required to continue government operations.

63. Question: The budget eliminates funding for Enewetak Support based on implementation of the Compact.

Are you assuming implementation of the section 177 subsidiary?

Answer: I have been informed by the Office for Micronesian Status

63. (Continued)

Negotiations that they intend the Section 177 agreement to enter into force simultaneously with the Compact.

Question: Do you plan to implement section 177 prior to termination of the Trusteeship Agreement?

Answer: I have been informed by the Office for Micronesian Status Negotiations that they do not plan to implement Section 177 prior to termination.

Question: Is there any legal difference in the effectiveness of the espousal provisions of the section 177 subsidiary depending on whether the Marshalls is under the Trusteeship Agreement or is in free association? Please provide a legal analysis.

Answer: We have referred this question to the Department of Justice for a legal analysis. We will provide that analysis to the Committee as soon as it is completed.

64. Question: Funding for the relocation of the capitols was eliminated from the FY'86 budget with the curious statement that "Congress has indicated that funding for construction of the capitols will be provided in a future appropriation measure". Does this mean that the Administration opposes funding in FY'86, and if so in what year will you support funding?

Answer: The Administration supported funding the $21 million commitment for capitols in the past three budgets. In each case, Congress provided zero or only partial funding. The remaining commitment is $14.2 million. Because of the deficit situation and the need to reduce federal spending, the Administration did not include funding for the capitols in the fiscal year 1986 budget, but will consider such a request in future budgets.

Question: Will future funding for the capitols be a responsibility of Interior or State?

Answer: The funding for the capitols remains a fundamental commitment of the United States. As long as the Trust Territory Government continues, we anticipate the responsibility would remain with the Department of the Interior.

Question: Assuming enactment and implementation of the Compact, what is the authorization for such funding?

Answer: In the case of many construction projects, the appropriation itself has served as the authorization.

64. (Continued)

Question: If the Administration supports further assistance why were funds not included in the FY'86 budget?

Answer: The Administration has made capitol relocation a high priority in past budgets. It cannot do that in fiscal year 1986 because of the need to reduce federal spending.

65. Question: There are no funds in the FY'86 budget for transition or closing the accounts of the Trust Territory although the Committee has previously been assured this would be done.

How do you plan to fund the carryover deficits for the FSM and the Marshalls?

Answer: We do not intend to fund any deficits incurred by the Marshalls or the FSM that have been incurred since recognition by the United States of the constitutional governments. The only carryover deficit for which the Administration accepts responsibility is that incurred by the Trust Territory Government prior to FY 1982 when the Micronesian governments took over responsibility for their own administration. The extent of that deficit has still not been fully defined and may not be until all obligations have been liquidated.

Question: Will such funds appear in the Interior or State Department budgets? What is the legislative authority if the compact is implemented?

Answer: When the amount of the deficit is defined and an additional appropriation is determined necessary, authorizing legislation can be proposed. Since we do not anticipate immediate closedown of the Trust Territory Government, any funding request will likely come through the Interior budget process.

Question: Last year in the hearings on the Compact, I specifically asked how these items would be funded and Assistant Secretary Montoya responded that an audit was underway and that "these will be programmed in the 1986 budget". Mr. Montoya went on to provide an estimate of $33 million. Where are these funds? Why did you not clarify the record last year?

Answer: Assistant Secretary Montoya's statement last year was optimistic and was based on several assumptions, including the completion of an audit and possible resolution of legal claims against the Trust Territory Government. These events have not taken place. The deficit came about many years ago because of inadequate recordkeeping and a perceived need by the Trust Territory

Government during that period to have maximum flexibility and be able to shift funds easily from one account to another. This has made it very difficult to audit the deficit and clearly define the shortfall. The legal claims are for the most part dependent on the actions of the claimants and the Courts and are out of the Department's control.

Question: What is the legislative authority for such appropriations upon enactment of the Compact and termination of the Trusteeship since current authorization would expire?

Answer: The Administration expects the Trust Territory Government to continue in existence, at least through fiscal year 1986. If additional appropriations are required concurrently or after the termination of the Trust Territory Government, new authorizing legislation could be proposed at the time of the budget request.

66. Question: If the Congress provides that the financial and programmatic assistance under the compact is to be administered by the Department of the Interior, what will be the impact on your FY'86 budget request in terms of personnel and operations?

Answer: The Department does not have any estimate on staffing and related expenses, as we have not considered this option. The current Administration position is that the Compact will be administered by an interagency body composed primarily of representatives from the Departments of State, Interior, and Defense.

67. Question: The Committee was informed last Congress by Ambassador Zeder that all provisions of the compact would be held in abeyance until the economic development plans were developed and concurred in. The Committee has just received a five year plan for the Marshalls.

What is the status of those plans?

Answer: With respect to the Marshall Islands, the 5-year plan that the Committee received has been formally adopted by the government of the Marshall Islands and has also been submitted to Ambassador Zeder.

With respect to the Federated States of Micronesia, a 15-year plan was officially adopted by the government of the Federated States in January 1985. The plan has not yet been submitted to the United States Government.

Question: What is the precise process for U. S. concurrence in these plans and specifically what agencies will be involved in the review and what will be their role?

67. (Continued)

Answer: I have been informed by the Office for Micronesian Status Negotiations that the plans will be reviewed by a panel drawn from several agencies, including State, Commerce, AID, Treasury, Defense and Interior. This group, which will ultimately make recommendations with respect to final United States concurrence in the plans, will also meet with officials of the Governments of the Marshall Islands and the Federated States of Micronesia to discuss the plans.

Question: Do you plan to submit these plans to the Congress prior to hearings on the appropriations for the compact? If not, when do you plan to submit them?

Answer: I have been informed by the Office for Micronesian Status Negotiations that they have already transmitted the first Marshall Islands plan to the Chairmen of the House and Senate committees with jurisdiction over the Compact and to committee and subcommittee staff. They will do the same with future Marshallese documents and with the Federated States of Micronesia plan as they are received.

Question: Compact funding for the capital account for the Marshalls is for 15 years and their plan is only for five years. What happens in year 6?

Answer: I have been informed by the Office for Micronesian Status Negotiations that the remainder of the Compact funding period will be covered in additional documents and extensions of the Marshall Islands plan which will also be subject to United States concurrence pursuant to Compact Section 211(c).

68. Question: How do you reconcile the budget submission on the Compact in the State Department and Palau in Interior with the Administration's position on single termination of the Trusteeship and no implementation until termination?

Answer: The primary goal of the Administration has always been to implement a Compact of Free Association and concurrently terminate the Trusteeship Agreement for all of the Micronesian entities. However, if this is not possible because of the inability of Palau to resolve their constitutional problems with respect to the Compact, then the Administration will have to consider partial termination as an alternative. The budget presumed that there was a good possibility that the ratification problem in Palau could not be resolved, thus the inclusion of continued operations support for Palau in the President's budget rather than Compact funding.

69. Question: If the Administration is proposing piecemeal termination, will such action include the Northern Marianas?

How would you accomplish such termination?

Answer: I have been informed by the Office for Micronesian Status Negotiations that the State Department will take up the question of termination of the Trusteeship Agreement at the appropriate time with the Trusteeship Council and the Security Council of the United Nations. They will apply this practice to any termination of the Trusteeship Agreement.

Question: How would such action be reconciled with previous U. S. positions, such as with Southwest Africa?

Answer: I have been informed by the Office for Micronesian Status Negotiations that the United States has traditionally preferred, and has stated its preference for, a termination of the Trusteeship Agreement at one time for all components of the Trust Territory. This has been a policy position since neither the Trusteeship Agreement nor the United Nations charter specify procedures for the termination of the Trusteeship Agreement. The Namibia situation is different from that of the Trust Territory, primarily in that Namibia was never placed under a United Nations trusteeship. The fact that the Trust Territory is a unique "strategic" trusteeship makes the comparison even less useful.

Question: What is the role of the United Nations in the process?

Answer: The Office for Micronesian Status Negotiations has informed me that, since their is no precedent, this is a matter that will have to be taken up with the Trusteeship Council and the Security Council of the United Nations at the appropriate time.

Question: There is a certain time element involved. By what date must the compact be enacted if the U. S. is to complete whatever process is involved in the U. N. prior to October 1, 1985?

Answer: I have been informed by the Office for Micronesian Status Negotiations that they anticipate that Congress will enact the Compact joint resolution in time for its implementation on October 1, 1985. If it appears that this will be the case, they will begin consultations with the United Nations in anticipation of a full or partial termination of the Trusteeship Agreement.

Question: What are your plans with respect to funding if the Compact is enacted but the trusteeship not terminated by October 1, 1985?

Answer: I have been informed by the Office for Micronesian Status Negotiations that they believe that the effective date of the Compact and the date of termination of the Trusteeship Agreement should be coincident. If both cannot occur by the same date, the United States will have to consider other options such as partial termination or changes in Executive Order 11021. The Committee would be fully consulted before such a decision is made.

70 Question: What precisely in the Compact could not be fully implemented by Secretarial Order during the Trusteeship if the Compact were enacted.

Answer: I have been informed by the Office for Micronesian Status Negotiations that the Compact is the document that sets forth the legal and political parameters of the relationship of free association between the United States and the Marshall Islands and the Federated States of Micronesia. This relationship is premised on the emergence of these governments from the trusteeship era, on their exercise of their sovereign right to self determination and on their capacities as self-governing states. As such, the element most central to the Compact--the international political status that it embodies--could not be implemented until termination of the Trusteeship agreement. The nature of the free association relationship is such that it could not be implemented unilaterally by an administrative order of the United States. There are a few provisions of the Compact which could be implemented by the laws and orders of the United States, primarily those having to do with the extension of services and programs which now operate in the Trust Territory and with economic assistance.

Question: All the jurisdictions in the Trust Territory are conducting international discussions and concluding agreements with foreign governments, such as fisheries. Is there any legal impediment to governments operating under the Compact with appropriate certification or notification to foreign governments prior to formal termination of the trusteeship.

Answer: The activities that the components of the Trust Territory are are presently carrying out with respect to foreign governments and commercial organizations are being conducted with the encouragement, but under the general authority , of the United States which, in its capacity as administering authority, is ultimately responsible for the foreign relations of the Trust Territory. Under the Compact, the U.S. will recognize the capacity of the freely associated states to conduct their own foreign affairs, subject to the provisions of the Compact. Thus the Office for Micronesian Status Negotiations informs me that the foreign affairs provisions of the Compact would not be implemented until after termination of the trusteeship agreement.

71. On February 26, 1985, the Department furnished the Committee with the information I had requested on the original agency budget submissions to the Department and to OMB. I understand that the original submission to the Department for FY'86 was due on June 1, 1984. The information which you provided indicates that no funds were requested for either the Marshalls or FSM from Territories. To accomplish this, which I assume was consistent with inclusion of funding in State for the Compact, one of two options had to be assumed -- either amendment of Executive Order 11021 to transfer responsibility for a portion of the Trust Territory to the Department of State or termination of the Trusteeship. Since funding for Palau was included in the submission, termination would have to be partial. The hearing on the Compact during which I received assurance that there would be full and prior consultation with the Committee occurred only one week previously, on May 24, 1984. Assistant Secretary Montoya appeared and testified at that hearing and I assume heard the assurance, knowing that not only had the decision been made but was in the process of being implemented.

Question: Was the decision to eliminate funding for the Marshalls and FSM initiated by OTA or directed by OMB?

Answer: The decision to eliminate funding was purely a budgeting decision based on an assumption that the Compact could be approved and implemented by FY 1986.

Question: Did you feel any obligation to correct the record or inform the Committee that a decision was already assumed?

Answer: The Department of the Interior, particularly from a budget perspective, has only viewed the Compact in terms of an implementation date. The question of termination of Trusteeship has always been considered to be within the province of the State Department. We regret that we did not make the connection and correct the record during the hearing.

Question: Were or are you or other officials in the Department under any constraint from initiating discussion with this Committee on the management of funding of the Trust Territory? If so, what is the scope of such constraint and who has imposed the constraint?

Answer: To the best of my knowledge, no officials in the Department have been placed under any constraints from discussing Trust Territory management or funding questions with the Committee.

71. (Continued)

Question: If not, why did you not seek to clarify the record or attempt to ascertain the feelings of the Committee as to which alternative we would prefer?

Answer: Ever since the decision was made to proceed with a Compact for only two of the three Micronesian governments, our primary concern has been getting the Compact approved and implemented for those two governments. We had not focused on whether that would be done by changes in Executive Order or Trusteeship termination.

Question: Since it appears to be the present intention of the Administration to consider partial termination, when did the Department become aware of that decision and why did you not inform the Committee?

Answer: We have been informed by the Office for Micronesian Status Negotiations that their intention is still to terminate the Trusteeship Agreement for all components of the Trust Territory at the same time and do that simultaneously with Compact implementation. As it is becoming more apparent that Palau will not resolve its constitutional concerns in time to be included in the current approval process, the possibility of partial termination becomes a more likely option for consideration. The Department was only recently advised that this option was now being considered and immediately arranged for Ambassador Feldman to brief the Committee Chairman.

Question: The information supplied to the Committee also indicates that at no point were transition funds included in the submissions despite Assistant Secretary Montoya's assurance one week earlier that funds would be included in the FY'86 budget. How did you intend to fulfill the commitment if at least an estimate was not included or were you under direction not to include any funding?

Answer: The transition items were raised and discussed in the budget process. Our major concerns are a deficit being carried on the Trust Territory Government financial statement, potential legal claims against the Trust Territory Government and the many costs of physically closing down the Trust Territory Government. With regard to the deficit, we still do not have a clear picture of what constitutes the deficit and how much funding is required to liquidate it. The same holds true for legal claims and liabilities with respect to close down costs. We do not intend any immediate closedown of the Trust Territory Governments since Palau has still not resolved their consitutional problems with respect to the Compact. However, we are continuing to phase down the Trust Territory headquarters operations and are doing that within budget. We would like to point that all of these items are liabilities of the Trust Territory Government and failure to fund them in FY 1986 would have no financial impact on the FSM or the Marshalls.

71. (Continued)

Question: If you were under direction, did that direction to OTA come from the Department or OMB and was Assistant Secretary Montoya aware of that when he testified?

Answer: At the time Assistant Secretary Montoya testified, he had been asked to review the transitional issues as part of the Department's budget process. The results of the review were that we still did not have sufficient information to put together a budget request, nor was there any urgency to the issues that required the funding be included in the FY 1986 process.

QUESTIONS SUBMITTED BY SENATOR WEICKER

72. Question: The proposed FY86 Office of Territorial Affairs budget is $141 million, a decrease of $97 million. Of this $97 million decrease, $85 million is a reduction in the Trust Territory funding and assumes the availability of Compact funding in FY86. The State Department budget contains the Compact funding which is contingent on Compact passage this year. Funding for the other territories is reduced by $14 million (19 percent) and staffing levels for OTIA are to be reduced by 51 persons (23 percent).

Interior proposes to end all activities in the Federated States of Micronesia and Republic of the Marshall Islands. It seems that this sudden shift in policy could have serious repercussions. What about the mechanics of transition?

Answer: We do not believe this is a sudden shift in policy or that the mechanics of transition is an obstacle that we must overcome. The Administration has been phasing down the Trust Territory Government for the past four years. Most functions have already been assumed by the new constitutional governments in Micronesia. The only functions remaining in the Trust Territory Government are those that cannot be delegated, such as serving as a clearinghouse for federal programs, legal advise and defense of the Trust Territory Government, oversight of the construction projects and maintenance and security of Trust Territory Government property. These functions are expected to continue as long as there is a Trusteeship responsibility, although the Department is attempting to achieve additional staffing and cost efficiencies.

Question: What will happen to oversight of ongoing projects?

Answer: The Department of the Interior will continue to oversee ongoing projects until completion. The FY 1986 budget includes sufficient staff and funds to meet this responsibility.

Question: Who will train territorial and State Department personnel to assume oversight responsibilities?

Answer: Territorial personnel have received a significant amount of training as well as on-the-job experience over the past several years. Additional technical assistance is provided for in the Compact. Federal training is always available for the State Department personnel, as appropriate. Since Interior would play an integral role in any interagency administrative group, its expertise would still be available as needed.

72. (Continued)

Question: Please provide the Committee with a copy of any specific plans the Department has developed to mitigate the impact of Interior's withdrawal from these insular areas.

Answer: The Department has been phasing down the Trust Territory Government and turning over responsibilities to the Micronesian governments for several years now. We believe the Micronesian governments are fully prepared to assume all remaining responsibilities when the Compact is implemented.

Question: Does the Administration have any difficulties with how the Department of Interior has handled relations with the Trust Territories?

Answer: The Department of the Interior is not aware of any difficulties the Administration has had with how it has handled relations with the Trust Territory.

Question: If not, then why is the funding being shifted away from the Interior?

Answer: The shift in funding is based on a decision made several years ago that the new independent status of the Micronesian governments could best be administered by an interagency group. Administrative responsibilities for the interagency group would be handled by the Department of State.

73. Question: Compact funding is not included in the Interior Department request. Does this indicate that the Administration does not want to encourage involvement of the Interior Department in post-compact relations with the Trust Territories?

Answer: No, it does not. The Department of the Interior would have an active role in the interagency group.

74. Question: Your budget for the Trust Territories assumes passage of the Compact of Free Association and the availability of Compact funding in FY86. What will be the Department's response if it becomes clear that the Compact funding will not be available by the beginning of FY86?

Answer: If Compact funding is not available in FY 1986, the Department will seek budget adjustments to insure sufficient funding is available for the continuing support of government operations in the FSM and the Marshall Islands.

75. Question: Is it not true that the Department of Interior has more experience in the infrastructure development and extension of domestic programs to the Trust Territories than any other federal agency?

Answer: Yes, that is true; but the U. S. relationship with these governments is changing and will require State Department experience in dealing with foreign governments. The Department of the Interior, through its representation on the interagency group, will still be able to contribute its expertise with regard to domestic programs.

76. Question: What were the budget requests for the Federated States of Micronesia and the Republic of the Marshall Islands for FY85?

Answer: With respect to the Federated States of Micronesia (FSM), the Department requested $40.4 million for operations and $17.4 million for construction projects in the FY 1985 budget. The FSM requested an additional $336,000 for operations and an additional $17.34 million for construction. The final appropriation was $40.342 million for operations and $15.42 million for construction.

With respect to the Marshall Islands, the Department requested $11.5 million for operations and $2.6 million for construction. The Marshalls requested an additional $4.5 million for operations and an additional $12.1 million for construction. The final appropriation was $11.4 million for operations and $3.4 million for construction.

77. Question: The United States Government committed itself to the completion of a capitol for the Federated States of Micronesia. Would you please provide the most recent cost estimate for the completion of this capitol, the disposition of funds which have been appropriated for the project and the schedule of construction to completion?

Answer: The United States has agreed to contribute $15 million toward construction of a new capitol. The FSM has completed the design for a capitol that would cost approximately $23.8 million. To date Congress has appropriated just under $6 million, including $2.1 million for architectural engineering and design and $3.9 million to begin construction. Construction has not yet begun, so we do not yet have a firm schedule for construction.

78. Question: What special management initiatives and efficiences have allowed for a 20 percent reduction in OTA staffing?

78. (Continued)

Answer: The current program in OTIA focuses on increasing the efficiency and reducing the size of the territorial governments. We could not in good conscience ask the territorial governments to take such actions without seeking to make similar efforts in our own operations. Efficiencies that are being instituted include the stationing of field representatives in each of the U.S. territories and installing better communications equipment in the Washington office and in the territorial offices.

79. Question: The budget states that the reduction of the technical assistance budget from 5 to 2.2 million dollars will allow a larger number of smaller projects to be funded than in the past. Is it the Department's position that technical assistance should only be used for smaller projects? If so, are larger projects to receive special appropriations?

Answer: The Department's preference is that technical assistance include only projects that require the direct assistance and project supervision by Federal personnel. This would be true regardless of the size of the project. Most other projects, including construction and other special programs should be funded as a special grant appropriation, whereby the territorial government has the major responsibility for project administration and the Department's role is more one of general oversight and ensuring that grant requirements are met.

80. Question: Could the Department please comment on the need for, cost and planning status of the following projects:

- Upgrading of local phone systems of Truk and Pohnpei States FSM.

- New hospital facilities in Palau.

- Airstrips in the Southwest Islands of Palau to provide for fisheries surveillence and emergency transportation.

- Port facilities improvements in Saipan.

- New capitol Majuro.

Answer: OTIA is not familar with any specific request for upgrading the telephone system in Truk and Pohnpei. However, the Compact provides for $6.0 million to the FSM for communications. This may be used for upgrading local systems.

The Republic of Palau has just advised us that they have completed the architectural studies for the hospital, but we have not had the opportunity to review the report.

80. (Continued)

The request for the airstrip in Palau is recent and we have not had the opportunity to evaluate the proposal. However, we note that funding is provided in the Compact for surveillance of fisheries.

The Department believes there is a need for improved port facilities in Saipan, but we are of the opinion that this project is of significant commercial value and the private sector should participate in such an effort.

The United States has agreed to contribute $3 million towards the construction of a new capitol on Majuro. The Marshalls has completed the design for a $7 million facility and is awaiting appropriation of the remaining commitment of $2.6 million before they begin construction. The Department has requested this money in its budget for the last three fiscal years.

81. Question: Would you please list the amount of unobligated and unspent funds for each of the territories and name the projects for which they were intended?

Answer: The information is only readily available for the U. S. Territories and is provided in the following tables. To prepare a similar table for the Trust Territory, we must obtain and compile data that is maintained by the Micronesian governments and by the Navy Officer-in-Charge of Construction (OICC). We will provide that table to the Committee as soon as we receive the information.

GUAM
STATUS OF ACTIVE CIP

| Project | Fiscal Year | Grant Amount 1/ | Drawdowns to Date | Grant Balance | Guam Expenditures to Date 2/ | Unexpended Grant Authority |
|---|---|---|---|---|---|---|
| Emergency Generators | 1978 | 1,092,000 | 1,092,000 | -0- | 1,066,574 | 25,426 |
| Water lines - North/ South & Central | 1979 | 5,475,000 | 5,475,000 | -0- | 5,361,335 | 113,665 |
| Guam Penitentiary | 1980 | 8,274,000 | 8,274,000 | -0- | 7,354,966 | 919,034 |
| Dededo Reservoir | 1980 | 2,263,000 | 2,263,000 | -0- | 2,137,363 | 125,637 |
| Waterline-Agat/Santa Rita | 1981 | 3,200,000 | 3,200,000 | -0- | 2,824,255 | 375,745 |
| Six Deep Wells | 1981 | 675,000 | 675,000 | -0- | 272,677 | 402,323 |
| Waterline Relief - Tumon | 1981 | 100,000 | 100,000 | -0- | -0- | 100,000 |
| Waterline - Mongmong/Maite | 1981 | 568,000 | 568,000 | -0- | 513,760 | 54,240 |
| Waterline - Agana/Asan | 1981 | 950,000 | 950,000 | -0- | 7,152 | 942,848 |
| Agat - Santa Rita Jr./Sr. High | 1981 | 2,655,000 | 2,655,000 | -0- | 2,644,684 | 10,316 |
| School Repair & Renovation | 1981 | 4,095,000 | 4,095,000 | -0- | 2,766,358 | 1,328,642 |
| Waterline - Yigo/Mangilao | 1982 | 1,023,000 | 949,837 | 73,163 | 962,939 | 60,061 |
| Bridges | 1982 | 3,597,000 | 2,521,498 | 1,075,502 | 981,208 | 2,615,792 |
| High School Equipment | 1982 | 1,133,000 | 1,133,000 | -0- | 1,050,210 | 82,790 |
| Rt. 11 A | 1982 | 1,469,000 | 367,250 | 1,101,750 | 209,544 | 1,259,456 |
| Crime Lab Renovation | 1982 | 130,000 | 130,000 | -0- | -0- | 130,000 |
| Wells | 1982 | 998,000 | 997,998 | 2 | 974,929 | 23,071 |
| Recreation Building | 1982 | 259,000 | 259,000 | -0- | 252,750 | 6,250 |
| Waterlines- Dededo/Mangilao/Windward Hills/Chalan Pago | 1983 | 2,567,000 | 330,000 | 2,237,000 | 161,855 | 2,405,145 |
| Harbor of Refuge | 1983 | 1,485,000 | 371,250 | 1,113,750 | 193,352 | 1,291,648 |
| Dock Facility | 1983 | 1,320,000 | 330,000 | 990,000 | 440,000 | 880,000 |
| Northern Area Health Center | 1983 | 1,000,000 | 99,740 | 900,260 | -0- | 1,000,000 |
| Tumon Bay | 1984 | 11,350,000 | 767,500 | 10,582,500 | 410,381 | 10,939,619 |
| Memorial Hospital | 1985 | 5,610,000 | -0- | 5,610,000 | -0- | 5,610,000 |
| Totals |  | 61,288,000 | 37,604,073 | 23,683,927 | 30,586,292 | 30,701,708 |

1/ Grant amounts have been adjusted to reflect approved reprogrammings.
2/ Expenditure figures are as of September 30, 1984.

## AMERICAN SAMOA
## STATUS OF ACTIVE CIP

| Project | Fiscal Year | Grant Amount | Drawdowns to Date | Grant Balance | AS Expenditures to Date | Unexpended Grant Authority |
|---|---|---|---|---|---|---|
| Dock Expansion | 1981 | $4,950,000 | $4,950,000 | -0- | $4,224,328 | $725,672 |
| Dining Facilities | 1981 | 450,000 | 450,000 | -0- | 448,749 | 1,251 |
| Marine Railway | 1981 | 1,800,000 | 1,800,000 | -0- | 1,641,532 | 158,468 |
| Tafuna Road | 1981 | 450,000 | 450,000 | -0- | 459,955 | (9,955) |
| Power | 1981 | 319,865 | 319,865 | -0- | 319,865 | -0- |
| Samoana H.S. Classroom | 1982 | 605,000 | 605,000 | -0- | 428,506 | 176,494 |
| Vocational Educ. Bldg. | 1982 | 346,000 | 346,000 | -0- | 68,454 | 277,546 |
| School Buses | 1982 | 173,000 | 173,000 | -0- | 136,785 | 36,215 |
| Manua Water System | 1982 | 360,000 | 360,000 | -0- | 103,935 | 256,065 |
| Fagamalo Rd. Drain | 1982 | 1,382,000 | 1,382,000 | -0- | 778,714 | 603,286 |
| Satala Plant Generator | 1982 | 1,440,000 | 1,440,000 | -0- | 1,440,000 | -0- |
| Ofu Dock | 1982 | 259,000 | 259,000 | -0- | 224,065 | 34,935 |
| Village Water System | 1982 | 511,107 | 511,107 | -0- | 212,664 | 298,443 |
| Fishing Dock Support Facility | 1982 | 605,000 | 605,000 | -0- | 227,064 | 377,936 |
| Village Water System Extension | 1982 | 211,000 | 211,000 | -0- | 197,940 | 13,060 |
| Pump Purchase Rehab. | 1982 | 135,000 | 135,000 | -0- | 124,702 | 10,298 |
| Malaeimi Waterline | 1982 | 45,000 | 45,000 | -0- | 29,999 | 15,001 |
| Water System Leak Detection | 1982 | 14,400 | 14,400 | -0- | 45,118 | (30,718) |
| Aua/Leloaloa Waterline | 1982 | 270,000 | 270,000 | -0- | 239 | 269,761 |
| Generator | 1982 | 1,500,000 | 1,500,000 | -0- | 1,500,000 | -0- |
| Unassigned | 1982 | 742,493 | 742,493 | -0- | 83 | 742,410 |
| Tugboat | 1983 | 810,000 | -0- | 810,000 | -0- | 810,000 |
| Schools | 1983 | 517,000 | -0- | 517,000 | 9,492 | 507,508 |
| Roads | 1983 | 450,000 | -0- | 450,000 | 29,060 | 420,940 |
| Power | 1984 | 4,000,000 | 4,000,000 | -0- | 4,000,000 | -0- |
| Marine Railway | 1984 | 1,000,000 | 500,000 | 500,000 | 900,000 | 100,000 |
| Power | 1985 | 1,639,000 | 500,000 | 1,139,000 | 500,000 | 1,139,000 |
| Marine Railway | 1985 | 1,960,000 | -0- | 1,960,000 | -0- | 1,960,000 |
| Admin. Bldg. | 1985 | 1,470,000 | -0- | 1,470,000 | -0- | 1,470,000 |
| Housing Mortgages | 1985 | 980,000 | -0- | 980,000 | -0- | 980,000 |
| Totals | | 29,394,865 | 21,568,865 | 7,826,000 | 18,051,249 | 11,343,616 |

## NORTHERN MARIANA ISLANDS
## STATUS OF ACTIVE CIP

| Project | Fiscal Year | Grant Amount | Drawdowns to Date | Grant Balance | NMI Expenditures to Date | Unexpended Grant Authority |
|---|---|---|---|---|---|---|
| Hospital | 1983 | $10,000,000 | $8,196,568 | $ 1,803,432 | $4,439,311 | $3,757,257 |
| | 1984 | 10,000,000 | -0- | 10,000,000 | -0- | -0- |
| | 1985 | 6,370,000 | -0- | 6,370,000 | -0- | -0- |
| Subtotal | | 26,370,000 | $8,196,368 | $18,734,432 | $4,439,311 | $21,930,689 |
| Water | 1985 | 1,960,000 | -0- | 1,960,000 | -0- | -0- |
| Total | | $28,330,000 | $8,196,368 | $20,694,432 | $4,439,311 | $23,890,689 |

VIRGIN ISLANDS
STATUS OF ACTIVE CIP

| Project | Fiscal Year | Grant Amount | Drawdowns to Date | Grant Balance | VI Expenditures to Date | Unexpended Grant Authority |
|---|---|---|---|---|---|---|
| Detention Center | 1983 | $1,500,000 | $ 92,500 | $1,407,500 | $ 4,445 | $1,495,555 |
| Water and Power Planning | 1983 | 1,000,000 | 231,500 | 768,500 | 88,060 | 911,940 |
| Detention Center | 1984 | 1,500,000 | 129,500 | 1,370,500 | 4,445 | 1,495,555 |
| Water Distribution | 1984 | 1,000,000 | -0- | 1,000,000 | -0- | 1,000,000 |
| Total |  | $5,000,000 | $453,500 | $4,546,500 | $96,950 | $4,903,050 |

82. Background: The budget for Outer Continental Shelf activities in the Minerals Management Service is proposed for a minor reduction of 6 percent from $100 million to $94 million, largely for projected administration savings in salaries and travel. However, depressed oil prices have sharply reduced oil industry interest in the OCS. In fact, there were no industry bids on OCS Sale No. 82 last year and Secretary Hodel recently announced the postponement of 3 other sales and the cancellation of one.

o Low oil prices apparently reduced industry interest in OCS leasing. For example, there were no bids in OCS Sale No. 82 last year and postponements have been announced for Sales numbered 88 and 90 this year. How will these changes affect the Department's projections in FY 1986?

Answer: I have been informed by the Minerals Management Service of the following: The fact that no bids were received for Sale 82 in the North Atlantic can be attributed only in part to low oil prices. Originally, the sale had been planned in two phases pending resolution of the Canadian-U.S. boundary dispute. Many of the best prospects were held out of the sale and were ultimately determined to be in Canadian waters. Industry was concerned that following a successful bid approval of exploration and development, their plans might be delayed, because of the outstanding litigation by Massachusetts, and they could have a large amount of money tied up in escrow while the case was tried on its merits.

Other factors which chilled industry interest include the removal of prime acreage by congressional moratorium, a preponderance of deep water tracts, hostile physical environment, and the high risk exacerbated by the dry holes drilled in the North Atlantic and the recently completed Shell drilling in the mid Atlantic. It should be noted that very active bidding took place on other 1984 sales.

Sale 90 (South Atlantic) was put on hold due to minimal industry interest. Sale 88 (Gulf of Alaska/Cook Inlet) was put on hold as a result of minimal industry interest due to poor results from previous drilling in that area.

Declining prices and real price expectations did affect these sales and a continuation of this situation could potentially have an effect on outyear revenue projections. Lower anticipated future prices were taken into account for the Department's FY 1986 projection for rents and bonuses.

Question: Of the $100 million funding request for OCS activities, can you tell us how much of this total is to be spent on the Exclusive Economic Zone minerals program?

Answer: In FY 1986, MMS funding for strategic and critical mineral studies in the Exclusive Economic Zone (EEZ) is $2.0 million. This will fund investigations of the occurrence and distribution of strategic/ critical minerals in the EEZ, assessing their development potential, and conducting environmental studies that might be associated with future EEZ leasing.

83.

Question: The Minerals Management Service published the Call for Information in the Federal Register in preparation for an EIS of cobalt crust leasing in Hawaii.

a. Does the MMS have the facilities needed to assess the potential of the deposits and to assess the environmental impact of mining?

b. If not, then which agency will MMS be working with to make these assessments?

c. How does the funding of the cobalt crust program compare with that of the polymetallic sulfides program? (Please include USGS as well as MMS funding data.)

d. How does the level of knowledge compare between these two programs?

a. Answer: Minerals Management Service (MMS) does not maintain or operate any facilities for this program. Instead, contractors are utilized (industry, State of Hawaii, USGS) to acquire data and conduct the necessary resource and environmental studies and assessments with MMS's review and evaluation.

b. Answer: Minerals Management Service has established cooperative efforts with the U.S. Geological Survey, Bureau of Mines, National Oceanographic and Atmospheric Administration, and the State of Hawaii to conduct the economic, engineering, and environmental studies needed to evaluate the development potential of these deposits and assess the environmental impact of mining.

c. Answer: Minerals Management Service funding for the polymetallic sulfides program in the Gorda Ridge area is $300,000 in FY 1984, and $500,000 in FY 1985 for Oregon; FY 1985 funding for California totals $500,000. This compares with the $1.8 million provided to the State of Hawaii for the cobalt crust program.

U.S. Geological Survey funding for the polymetallic sulfides program was $1.0 million in FY 1984, $2.9 million in FY 1985, and $2.5 million in FY 1986; while funding for their cobalt crust program was $1.2 million in FY 1984, $1.2 million in FY 1985, and $1.2 million in FY 1986.

d. Answer: Both programs are in the early phases of evaluating the mineral resource potential and environmental impacts of developing these deposits. However, based on the studies conducted to date more data is available on the polymetallic sulfides deposits than the cobalt crust deposits.

Enclosure 1

QUESTIONS SUBMITTED BY SENATOR WALLOP

84. Question: Mr. Secretary, in your budget proposal for the Minerals Management Service, you propose that the relevant onshore mineral leasing administrative costs of the MMS, BLM, and the Forest Service be deducted from Federal onshore mineral leasing receipts before such receipts are distributed from the Treasury to the States. You propose that the $125.2 million come off the top as follows:

| | |
|---|---|
| MMS Costs | 33.2 |
| BLM Costs | 65.9 |
| BLM Administration | 11.9 |
| FS Minerals | 14.2 |
| TOTAL | $125.2 |

This is not the first time around for this proposal, we've seen it for about the last three years. This time, however, it looks as though if any MMS employee had even a passing thought about mineral royalty distribution, it was counted at about $100.00 per hour.

If memory serves me, last time the Administration proposed "cost sharing," the total was around $25 million. How did you arrive at the $125.2 million? I would also appreciate some detailed cost breakdowns for this proposal as well as for the previous years.

The following chart details the derivation of amounts for cost sharing:

| | Estimate (millions) |
|---|---|
| MINERALS MANAGEMENT SERVICE | |
| Royalty Management<br>(FY 1986 Royalty Management Budget Estimate X .74) = ($37.4 X .74) 1/ | $ 27.7 |
| MMS General Administration<br>$\left(\frac{\text{RMP FTE}}{\text{MMS FTE - Admin. FTE}}\right)$(X Administrative Budget Estimate (X .74)<br>$\left(\frac{560}{2000-284}\right)$(\$22.3)(.74) | 5.5 |
| Subtotal, MMS | $ 33.2 |
| BUREAU OF LAND MANAGEMENT 2/ | |
| Oil and Gas | $ 41 |
| Geothermal | 3 |
| Coal | 18 |
| Nonenergy | 4 |
| Program Subtotal | $ 66 |
| BLM General Administration | |
| Program Subtotal x normal overhead rate of 18% | 11.9 |
| Subtotal, BLM | $ 77.9 |
| FOREST SERVICE | |
| Leasable Minerals (based on FY 1986 Forest Service Budget Estimate) | 14.1 |
| Total, Cost Sharing | $125.2 |

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1/ Seventy-four percent of all producing leases are Federal onshore.

2/ BLM program amounts based on FY 1986 estimate less services provided to Indian leases.

The rationale for deducting these costs is that the direct beneficiaries of the Federal onshore mineral leasing program should equitably share in funding the program, rather than the costs being borne by the general public as has previously been the case.

Enclosure 2

Minerals Management Service (MMS)
Summary of Costs and Assumptions

In developing the FY 1986 workload and budget estimates, the Department assumed that the entire Royalty Management Program is functionally directed toward accounting for and disbursing Federal and Indian mineral leasing revenues. This program was established specifically for that purpose in 1981, and performs no functions other than those related to mineral leasing revenues.

In determining methodology for royalty management cost recovery, the Department considered the calculations on two bases: producible leases or revenues generated by class of lease, e.g., offshore, onshore, and Indian. The producible leases option was selected as the most appropriate alternative because royalty management workload is more directly attributable to the number of leases than it is to the revenue generated from the lease. There is a base workload associated with each producible lease involving the establishment of accounts, the maintenance of basic accounting records, the submission of reports, and the distribution of funds. These functions must be performed whether the producible lease generated $10.00 in revenue or $10 million in revenue per annum.

Additional quantifiable workload associated with additional revenue generation once the lease base has been established has a minimal impact on the cost of management and operation for the MMS. Therefore, while offshore revenues (approximately 80 percent of the total) are a significant part of the gross, the associated lease base workload is significantly smaller, e.g. 7 percent. Hence, MMS costs are allocated on the basis of numbers of producible leases onshore versus total producible leases. At the end of calendar year 1983 (the data used in developing these estimates), there were a total of 20,717 producible leases. Of this total, 15,471 were Federal Onshore; 3,865 were Indian and 1,381 were Offshore. The MMS workload related to Federal Onshore mineral programs in the Royalty Management activity was therefore assumed to relate directly to this ratio: 15,471/20,717 Federal Onshore leases = 74 percent (rounded).

The MMS General Administration budget activity provides funding and staff support for indirect program management and administrative costs. Also included in this budget are the Service's fixed costs for rental space, Federal telephone service, and other support services. Since these functions support Royalty Management as well as the other programs of MMS, a pro rata share of MMS General Administration costs was added to the direct RMP costs to reflect total Federal costs related to Royalty Management. This allocation was based on a mathematical distribution developed under the assumption that administrative costs are proportional to the number of FTE supported. The Royalty Management Program staffing estimate for FY 1986 of 560 FTE represents approxiamtely thirty-three (32.6) percent of the total MMS direct program staff supported (1,716

FTE-T). Since approximately seventy-four percent (74) of the Royalty Management Program workload represents Federal onshore minerals support, the General Administration budget percentage was reduced to reflect the pro rata share attributable to that function: (32.6% x 74% = 24.1%). This percentage was then applied to the MMS General Administration budget activity estimate for FY 1986, leading to the pro rata allocation of $5.4 million in MMS administrative support costs to the Royalty Management Program, ($22.3 million x 24.1% = $5.4 million).

Summary of MMS Activity/Subactivity
Total Costs and Amounts Attributable to
Onshore Federal Mineral Leases

(Dollars in Thousands)

| | FY 1986 Estimated Total Costs for | Costs Attributable to Onshore Federal Mineral Leases (Excludes Indian Leases) |
|---|---|---|
| Royalty Management | | |
| Mineral Revenue Collections | 12,722 | 9,414 |
| Mineral Revenue Compliance | 10,288 | 7,613 |
| Systems Development/Operations | 14,546 | 10,764 |
| Total, Royalty Management | 37,556 | 27,791 or 27.8 million[1/] |
| General Administration | 22,275 | 5,368 or 5.4 million[1/] |
| Total, MMS | 59,831 | 33,159 or 33.2 million |

These costs are further detailed on subsequent pages.

[1/] The table which was previously supplied in our response to Committee question number 38, page 94, as well as the identical table in Enclosure 1 of this letter, which was inadvertently left out of our response to Committee question 84, page 130, show a Royalty Management total of $27.7 million and a MMS General Administration total of $5.5 million for a MMS total of $33.2 million. Revised numbers which are included in this attachment, $27.8 million and $5.4 million for Royalty Management and MMS General Administration respectively, correct for errors in rounding. The MMS total of $33.2 million, however, remains the same because the changes made are offsetting.

## MINERALS MANAGEMENT SERVICE
## ROYALTY MANAGEMENT PROGRAM

Subactivity: Mineral Revenue Collections

### I. Major Functions Performed

The major objectives of this subactivity are to collect and account for all mineral revenues due the Federal Government. Some of the functions performed include the following:

- Contact and interaction on a daily basis with payors and operators to encourage and improve reporting
- Funds administration and investment
- General ledger accounts maintenance
- Federal distribution and disbursements
- Bill verification and follow-up
- Accounts receivable
- Assessments and collections
- Error Correction
- Check processing
- Manage Electronic Fund Transfer (EFT) program
- Calculation of windfall profits tax
- Royalty-in-Kind program
- Refund requests processing
- Appeals' reports prepared
- Litigation support

### II. Distribution of Costs

The following information reflects an object class distribution of the total costs and amounts attributable to the collection of onshore Federal Mineral Receipts for the Mineral Revenue Collection subactivity:

(Dollars in Thousands)

| Object Class Summary | FY 1986 Estimated Total Costs for Revenue Collection | Costs Attributable to Onshore Federal Mineral Leases (Excludes Indian Leases) |
|---|---|---|
| Personnel Compensation | 9,162 | 6,780 |
| Personnel Benefits | 1,279 | 946 |
| Travel | 243 | 180 |
| Transportation of Things | 115 | 85 |
| Rents, Communications, Utilities | 442 | 327 |
| Printing and Reproduction | 123 | 91 |
| Other Services | 955 | 707 |
| Supplies and Materials | 253 | 187 |
| Equipment | 150 | 111 |
| Total Mineral Revenue Collections | 12,722 | 9,414 = 74% |

III. Description of Major Costs

The major costs for this subactivity are associated with personnel, travel, rents and communications, and other services. Over $400,000 of the $442,000 identified for rents and communications is attributable to the telephone equipment in the Lakewood Accounting Center (LAC) required by the Lessee Contact Branch for daily interaction with the payors and the public. The travel cost is attributable to payor/operator technical assistance visits, litigation support, field visits to BLM offices, and visits to LAC and/or headquarters. Other services costs are made up of $180,000 for General Services Administration (GSA) reimbursements (principally for 24 hours a day, 7 days a week operation), $95,000 for a contract for printing and mailing Bonus and Rental Accounting Support System (BRASS) notices and payor reporting forms (model 2014), $30,000 for courier service for depositing checks to Treasury, $321,000 for reference data base contract support, and $71,000 for litigation support and travel for administrative law judges. The remainder covers other miscellaneous contract items such as equipment maintenance, training, etc.

## MINERALS MANAGEMENT SERVICE
## ROYALTY MANAGEMENT PROGRAM

Subactivity: Mineral Revenue Compliance

### I. Major Functions Performed

The Minerals Revenue Compliance subactivity consists of two major functions: (1) Valuation and Standards and (2) Compliance. Valuation and Standards is responsible for valuing the products produced on Federal and Indian mineral leases to ensure that all royalties due are accurately received. The Compliance function is responsible for carrying out a comprehensive regulatory compliance program whose primary function is to perform audits of mineral revenue paying companies to ensure all royalties due on Federal and Indian leases are accurate and received on a timely basis.

Specifics functions and tasks include the following:

- Issue product valuation determinations, transportation deductions, and processing deductions.
- Provide advice and assistance to industry and States on product value matters.
- Prepare technical support documentation for appeals of royalty valuation decisions.
- Perform lease compliance reviews, company audits, and specialized audits.
- Perform cooperative audits with States and oversight of Section 202 and Section 205 contracts.
- Maintain residency teams at approximately 15 major companies where continuous audits are performed of the company's records.

### II. Distribution of Costs

The following information reflects an object class distribution of the total costs and amounts attributable to the Mineral Compliance subactivity in connection with the collection of Federal Mineral Receipts:

(Dollars in Thousands)

| Object Class Summary | FY 1986 Estimated Total Costs for Revenue Compliance | Costs Attributable to Onshore Federal Mineral Leases (Excludes Indian Leases) |
|---|---|---|
| Personnel Compensation | 6,360 | 4,706 |
| Personnel Benefits | 980 | 725 |
| Travel | 551 | 408 |
| Transportation of Things | 84 | 62 |
| Rents, Communications, Utilities | 211 | 156 |
| Printing and Reproduction | 10 | 7 |
| Other Services | 2,011 | 1,489 |
| Supplies and Materials | 42 | 31 |
| Equipment | 39 | 29 |
| Total Mineral Revenue Compliance | 10,288 | 7,613 = 74% |

## III. Description of Major Costs

Over 70 percent of the total cost in the Compliance subactivity is attributable to the 197 staff years of effort. The compliance travel of $551,000 is directly related to the audit work conducted by the Royalty Compliance regional offices. Audits are performed on-site at companies' accounting centers. Under rents, communications, and utilities, $211,000 is required to maintain office equipment, pay utilities for non-GSA space and commercial phone costs for industry contact for audit and royalty valuation purposes. Other services of $2,011,000 is earmarked for the following:

| | |
|---|---|
| $1,898,000 | Section 202 and 205 cooperative and delegated audit effort with Western States. |
| 113,000 | Miscellaneous equipment maintenance agreements and training. |

Compliance supplies and materials for 197 FTE is estimated at $42,000 while equipment replacement cost is $39,000.

## MINERALS MANAGEMENT SERVICE
## ROYALTY MANAGEMENT PROGRAM

Subactivity: Systems Development and Operations

### I. Major Functions Performed

The Systems Subactivity is responsible for the integrity and continued operations and maintenance of the three accounting systems which together account for all royalties, rents, and bonuses from Federal and Indian mineral leases. The specific functions performed are:

- Operating and maintaining 935 computer programs.
- Determining, obtaining, and installing necessary hardware.
- Modifying and enhancing operating systems to meet changing needs or to increase efficiency.
- Planning, designing, and installing new software systems.
- Provide support to 250 computer terminal interactive users.

### II. Distribution of Costs

The following information reflects an object class distribution of the total costs and amounts attributable to the Systems Development and Operations for the collection of onshore Federal Mineral Receipts:

(Dollars in Thousands)

| Object Class Summary | FY 1986 Estimated Total Costs for Systems | Costs Attributable to Onshore Federal Mineral Leases (Excludes Indian Leases) |
|---|---|---|
| Personnel Compensation | 1,647 | 1,219 |
| Personnel Benefits | 240 | 178 |
| Travel | 50 | 37 |
| Transportation of Things | 60 | 44 |
| Rents, Communications, Utilities | 199 | 147 |
| Printing and Reproduction | -- | -- |
| Other Services | 11,530 | 8,532 |
| Supplies and Materials | 291 | 215 |
| Equipment | 529 | 392 |
| Total, Systems Development and Operation | 14,546 | 10,764 = 74% |

### III. Description of Major Costs

The Systems Development and Operations subactivity has 61 FTE dedicated to operating and maintaining the Royalty Management Program systems,at a cost of $1.887 million.

Of the $11.530 million for other services, $11.0 million is earmarked for contract support for computer operations and maintenance. This contract effort provides support for data entry, system software maintenance and documentation, computer facilities management, and reference data base maintenance. Funding of $350,000 is required for equipment maintenance, $120,000 for micrographics support, $30,000 for equipment licenses, and the remaining $30,000 for technical staff training.

Funding of $291,000 is required for magnetic tapes, computer paper, micrographic supplies, micro diskettes, print bands, and technical reference books. Equipment is estimated at $529,000 for purchase of tape storage units, print buffers, high speed printer, hard disk to upgrade micro-computers, terminals, and computer peripherals that will enhance existing systems capacity.

## MINERALS MANAGEMENT SERVICE
## GENERAL ADMINISTRATION

General Administration funds and staff provide for the Service's executive management, administrative support, and basic fixed operating costs. These responsibilities are not directly attributable to any particular function, but are more adequately managed as Servicewide support required at varying levels during the operating year by all programs. The administrative functions included in this category are those required of all organizations to sustain the people and the general material support needs of the organization. The staff costs, as well as all other categories of expense for this budget subactivity, are detailed below.

The MMS allocation of General Administration costs to support the Federal onshore minerals program (Royalty Management) is based on a proration of total General Administration costs for the Bureau. An allocation based on authorized staff years was used to determine appropriate costs. The MMS Royalty Management FTE estimate for FY 1986 is 560. This represents 32.6 percent of direct staff ceiling (560/1,716). A further reduction in the allocation was made to assure that only 74 percent (the Federal Onshore share) was attributed to the cost of administering these programs. The amount of General Administration costs attributable to the MMS Royalty Management Program as displayed in the detailed table below is $5.368 million.

General Administration
Costs Related to Royalty Management (RMP)

(dollars in thousands)

FY 1986 Estimated Total Costs

| | Executive Direction | Admin. Operations | General Services | Total | Costs Attributed To RMP |
|---|---|---|---|---|---|
| Personnel Compensation | 2,576 | 6,541 | -- | 9,117 | 2,197 |
| Personnel Benefits | 321 | 929 | 211 | 1,461 | 352 |
| Travel | 90 | 222 | -- | 312 | 75 |
| Transportation of Things | 8 | 76 | -- | 84 | 20 |
| Rents, Communications, Utilities | 81 | 210 | 8,744 | 9,035 | 2,177 |
| Printing and Reproduction | 13 | 72 | -- | 85 | 21 |
| Other Services | 83 | 597 | 891 | 1,571 | 379 |
| Supplies and Materials | 41 | 272 | -- | 313 | 75 |
| Equipment | 38 | 259 | -- | 297 | 72 |
| Total | 3,251 | 9,178 | 9,846 | 22,275 | 5,368 = 24.1% |

## Bureau of Land Management

## Description of Costs Included in Mineral Leasing Cost Sharing Proposal

The Bureau of Land Management (BLM) is responsible for the conservation, development and management of both surface and mineral resources on approximately 310 million acres of public lands located in 28 States. In addition, BLM administers mineral leasing and supervises minerals operations on 370 million acres of Federal mineral estate underlying other Federally-administered, State or private ownerships throughout the United States and supervises most mineral operations on Indian lands.

The BLM costs identified in the MMS Budget Justification are $65.9 million from the Energy and Minerals Management program and $11.9 million from the General Administration program under the Management of Lands and Resources Appropriation.

The $65.9 million figure was derived as follows:

(in millions of dollars)

| Program | FY 1986 Estimate | Indian Lands Adjustment | Amount to be Recovered |
|---|---|---|---|
| Oil & Gas | 44.0 | -3.2 | 40.8 |
| Geothermal | 2.7 | 0 | 2.7 |
| Coal | 19.0 | -0.5 | 18.5 |
| Nonenergy Minerals | 4.1 | -0.2 | 3.9 |
| Total | 69.8 | -3.9 | 65.9 |

The $65.9 million represents the FY 1986 budget request for these mineral leasing programs reduced by the amount of funding anticipated to be expended managing these minerals on Indian lands. These are the Federal costs of managing programs that generate receipts which are subsequently shared with the States on a 50-50 basis under the Mineral Leasing Act of 1920 as amended. The estimate of the excluded costs related to Indian lands is based on 1984 and 1985 experience.

A breakdown of the $65.9 million follows. It is anticipated that approximately $48 million will be used for compensation and benefits for 1,687 FTE work-years of effort in these Federal mineral leasing programs, $10 million for contractual services for such efforts as coal drilling and KGS determinations, $2 million for equipment such as ADP and office machines, $3 million for program related travel, $1 million for transportation and vehicle costs and the remainder ($1.9 million) for costs of supplies and materials, printing, etc., to conduct these programs.

The remaining $11.9 million proposed to be deducted represents that portion of the Bureau's General Administrative program attributable to the Federal mineral leasing program. This amount was derived utilizing BLM's standard administrative overhead rate of 18 percent which is applied on all reimbursable accounts, cost recoverable programs, etc. This rate covers the costs of executive and managerial direction and administrative services and Bureauwide fixed costs such as space rental, telecommuncations, postal charges, etc.

The primary workloads that these funds will be utilized for are leasing (noncompetitive, simultaneous, and competitive), lease administration and adjustments of existing leases, processing of operator proposals on existing leases (applications for permits to drill, mining plans, reclamation plans, etc.), classifications and economic evaluations and inspection and enforcement. A brief summary of the type and scope of work performed in each of these programs appears below.

Oil and Gas. The Bureau currently manages 130,000 existing onshore Federal leases covering 135 million acres. Approximately 15,000 of these leases are in producing status. The primary workloads of the oil and gas program ($40.8 million and 1,193 FTE) and projected FY 1986 accomplishiments are:

| Workload | Accomplishments |
|---|---|
| ° Leasing | Competitive - 1,700 tracts<br>Simultaneous - 15,000 parcels<br>Over-the Counter - 8,000 applications |
| ° Lease Operations | APD's - 3,900 processed<br>Other Operator Proposals - 21,200 processed |
| ° Inspection & Enforcement | Compliance Checks - 31,700 |
| ° KGS Classifications | Determinations - 1,300 |
| ° Drainage Reviews | Reviews - 5,600 |

Geothermal. Federal lands contain 60 percent of the known or prospective geothermal resource areas, and there are currently over 3,000 leases covering 4.5 million acres. The primary workloads of the geothermal program ($2.7 million and 61 FTE) and projected FY 1986 accomplishments are:

| Workload | Accomplishments |
|---|---|
| ° Leasing | Noncompetitive - 540 applications<br>Competitive - 130 parcels |
| ° Lease Operations | Permits - 200 processed |
| ° Inspection & Enforcement | Compliance Checks - 700 |

Coal. Currently there are approximately 600 coal leases covering 950,000 acres of which 117 are producing. The primary workloads of the coal program ($18.5 million and 340 FTE) and the projected FY 1986 accomplishments are:

| Workload | Accomplishments |
|---|---|
| ° Leasing | Lease by Application - 1 processed<br>PRLA's - 67 processed<br>Regional Sales - 1 held<br>Emergency Sales - 20 held |
| ° Lease Operations | Operator proposals - 2,830 processed |
| ° Inspection & Enforcement | Compliance Checks - 4,950 |
| ° Classification & Economic Evaluation | Drill Hole Evaluations - 155 |

Nonenergy Minerals. The Bureau is responsible for leasing and managing Federal nonenergy minerals such as sodium (soda ash) phosphate, potassium (potash), lead and zinc. Currently, high percentages of domestic production of soda ash (37%) and potash (84%) comes from Federal leases. The primary workloads of the nonenergy minerals leasing program ($3.9 million and 93 FTE) and projected FY 1986 accomplishments are:

| Workload | Accomplishments |
|---|---|
| ° Leasing | PRLA's - 95 applications<br>Competitive - 91 tracts<br>Prospecting Permits - 544 issued |
| ° Lease Operations | Operator Proposals - 50 processed |
| ° Inspection & Enforcement | Compliance Checks - 1,700 |

## U. S. FOREST SERVICE

### Onshore Mineral Leasing Costs

Mineral leasing laws authorize the Department of the Interior to lease lands, including National Forest System lands, for production of certain "leasable" minerals including oil and gas, coal, phosphate, potassium, sodium, and sulfur. The minerals management objective of the Forest Service is to permit environmentally responsible prospecting and mining where those activities are authorized by law and are compatible with the overall forest plan. Mineral areas are managed to insure that mineral extraction results in minimal disturbance and damage to the land and that damaged lands are reclaimed.

The United States Forest Service (USFS) Minerals Area Management budget activity of the National Forest System Appropriation contains resources for Locatable Minerals, Common Variety Minerals, Geology and Leasable Minerals subactivities that total an estimated $28.6 million and 691 FTE for FY 1986.

Within this total, the request for Forest Service's Leasable Minerals Subactivity is $14.1 million and 341 FTE. These are the USFS onshore mineral leasing costs that the Administration has proposed be deducted from Federal onshore mineral leasing receipts before distribution to the U.S. Treasury and respective States.

These FY 1986 estimated costs are based on actual FY 1984 obligational experience as recorded by the USFS financial management system and on estimates from the Northern, Rocky Mountain, Southwestern, Intermountain, California and Pacific Northwest Regional Offices which perform the preponderance of the mineral leasing work.

Under this leasable minerals subactivity, the USFS acts on lease applications and environmental impact statements or environmental assessments; ensures that the leases and plans comply with applicable laws and regulations; protects surface resources; processes; approves and monitors operating plans; and administers special use permits. The costs are also based upon the 13,832 leaseable mineral operating plans that are projected for FY 1986.

The following is a breakout by object class of the costs associated with the leasable minerals subactivity ($ in millions):

| | |
|---|---|
| Salaries and benefits | 8.5 |
| Travel | .5 |
| Transportation of things | .4 |
| Supplies, materials, and equipment | .5 |
| Other contractural services | 4.2 |
| Total | 14.1 |

The Administration's proposal does not include the recovery of any portion of the General Administration activity of the National Forest System Appropriation, primarily because the Leaseable Minerals subactivity is a relatively small portion of the USFS's total operating budget. Funding for the Regional Foresters, Forest Supervisors and other general support costs is contained in this separate line item in the budget.

84. (Continued)

Question: Further, Mr. Secretary, how can you justify what will amount to a $53.3 million reduction for FY 1986, of which the State of Wyoming will shoulder about $20 million, when the State performs the majority of the administrative costs for the BLM? And this was long before the State signed a delegated audit authority with MMS last month. I have been told that in the last 6 months, one Wyoming part-time inspector inspected more wells than four full-time BLM employees.

Answer: The reduction in FY 1986 Payments to the States of $53.5 million is about 43 percent of the total estimated program costs of $125.2 million. Since the States share equally in distributed receipts, the Administration proposes that they also share in the costs of operating the programs which generate those receipts. By reducing gross receipts to finance program costs before distribution of shares to the States and the Federal Treasury, Payments to the States will represent a more equitable benefit to all receipients of these revenues.

Estimated net Payments to the States as contained in the FY 1986 President's Budget total $478 million. The estimated share of the costs for the State of Wyoming ($20 million) is a pro rata allocation based solely upon actual payments made during FY 1984. The Department is not aware of any onshore mineral leasing program area where the State pays the majority of the administrative costs.

85. Question: Mr. Secretary, in the FY 1985 Continuing Resolution for Appropriations, the House included legislative language in the Range Improvements portion of the BLM budget which was adopted by the Conferees. It states in part:

"Provided further, that the dollar equivalent of value, in excess of the grazing fee established under law and paid to the United States Government, received by any permittee or lessee as compensation for an assignment or other conveyance of a grazing permit or lease, or any grazing privileges or rights thereunder, and in excess of the installation and maintenance cost of grazing improvements provided for by the permittee in the allotment management plan or amendments or otherwise approved by the Bureau of Land Management, shall be paid to the Bureau of Land Management and disposed of as provided for by section 401(b) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701): Provided further, that if the dollar value prescribed above is not paid to the Bureau of Land Management, the grazing permit or lease shall be cancelled."

While the objectives may have been well intended, the results, particularly concerning assignment or conveyance of base properties and permit value, may be bad news for small ranchers currently facing really tough times. The language is technically incorrect and over reaches the problem. I have asked both DOI and the FS for drafts to correct the technicalities and the cloud on valuation. I would appreciate your personal attention to the problem and its resolution. Do you have any comments?

Answer: The Taylor Grazing Act (TGA) of 1934 gives a preference for grazing permits to persons living within or near a grazing district who are engaged in the livestock business. The Act further directs that grazing permits be issued as may be necessary to permit the proper use of lands, water, or water rights owned, occupied or leased by them.

Because of this language in the TGA, leases of base property have long been recognized as a legitimate basis for issuance of grazing permits and for transfering grazing permits from one party to another. The language in the FY 1985 Interior Appropriations Act can be interpreted to constrain legitimate transfers of grazing permits originating from leases or sales of base property. The condition which reads, "for an assignment or other conveyance," arguably goes beyond the intent of the language, which was specifically aimed at illegal subleasing arrangements. Although this problem might be solved by changing the language, we believe that proposed changes in our grazing regulations, which clearly define the illegal act, make the language in the Appropriations Act unnecessary. The regulations include penalties under other authorities which call for trespass action against unauthorized third parties, and cancellation or reduction of grazing privileges for permittees who engage in illegal subleasing.

Senator McClure of Idaho clarified the intent of the language by inserting the following in the Congressional Record on October 11, 1984.

> "This bill language was to address only the problem of subleasing of Federal grazing permits.
>
> This language is not intended to interfere with legal leasing under these permits or with the sale of land associated with grazing permits on public lands."

If the language in the Appropriations Act is not deleted entirely, then it should be clarified in accordance with Senator McClure's statement, so that the penalty applies only to illegal subleasing arrangements, and not to legitimate sales and transfers.

86. Question: During your confirmation hearing, I expressed my strong objections to any withholding of revenues provided by 1984 amendments to the Wallop-Breaux Sport Fishing Restoration Fund. Despite indications of strong Administration support for the program, the withholding proposal is included in the 1986 budget request. How can you, or the Administration support this proposal to divert these recreational user funds from their Congressionally directed uses?

Answer: The magnitude of the deficit has forced reconsideration of many of the domestic programs funded and possibly even supported by the Administration in the past. Each year the Executive Department sends to Congress a number of suggested changes in laws enacted earlier. Such proposals are made to correct omissions, control expenditures, improve efficiency, etc. In the 1986 budget submitted to Congress, we proposed the repeal of the permanent appropriation authority to control expenditures. Only if Congress repeals this authority will these funds be diverted. If Congress does not repeal this authority, the increase in funding for the program would be more than 200 percent. The magnitude of this increase is difficult to justify in light of the deficits and the need to constrain Federal spending.

Question: And, how can an Administration which proposed broad implementation of new user fees back off from one they called a "classic example" of a responsible payment formula by users for a public purpose?

Answer: The Administration supported the efforts to expand the level of funds for this program through the use of the user fee concept. However, when Congress passed the Deficit Reduction Act of 1984 which provided increased funding for the Sport Fish Restoration Program by establishing the Wallop-Breaux Trust Fund, revenues were included that did not meet the user fee concept. Revenues for the Sport Fish Restoration Account of the Wallop-Breaux Fund were to come from an excise tax on an expanded list of items related to sport fishing; import duties on fishing tackle, yachts and pleasure craft; and the motor boat fuel tax. The duties and motor boat fuel tax were already being levied and placing them in the Fund was a reallocation of revenue rather than a user fee.

The Administration still supports the transfer of the excise tax on sport fishing equipment. This is expected to provide a 16 percent increase in the Sport Fish Restoration Program in FY 1986. At a time when most domestic programs are being held to FY 1985 spending levels, the increase in the Sport Fish Restoration Program represents a significant advance.

86. (Continued)

Question: And, how can an Administration which proposes broad implementation of new user fees back off from one they called a "classic example" of a responsible payment formula by users for a public purpose?

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87. Question: Briefings to authorizing Committees on the proposed FS-BLM interchange have consistently emphasized the opportunity for public and Congressional participation as interchange plans are being drafted.

Shouldn't public hearings be completed before you ask for implementation authority?

Answer: Yes. Public meetings will be completed, and opportunities for public involvemunt will be provided before the necessary legislation to effect such a transfer is submitted.

Question: Also, I would appreciate detailed information on how this land swap will affect existing oil and gas leases on BLM and Forest Service land in Wyoming and other western states.

Answer: There will be no effect on existing oil and gas leases regardless of whether the BLM or FS administers the lease after the interchange is implemented. All leases will be administered under existing law, and no existing rights will be lost.

88. Question: In conjunction with the proposed BLM/FS land interchange, would you please tell me if these two agencies differ in the way in which they manage the lands under their respective jurisdictions and authorities in regard to acquiring water for Federal needs under reserved and non-reserved water right?

Answer: The right to use water on Federal reserved lands to fulfill the primary purpose for which the lands were reserved is created by the executive order, treaty, or congressional act that created the reservation.

Both agencies acquire the right to use water on Federal reserved lands for other than the primary purpose of the reservation or to use water on Federal lands that have not been reserved by complying with State law. In acquiring from the States the right to use water for grazing, there is a difference between the BLM and the Forest Service. BLM's permittees who expend their own funds to develop and improve water sources on the public lands are encouraged to acquire the right to use the water in their own names or jointly with BLM. This policy is designed to stimulate the improvement of Federal rangelands for multiple uses by the use of private funds.

Question: Also, I would like to know if there are any other differences in the way these two agencies allow access to water for private diversion; hydro facility siting; canals; transmission lines; access; rights of way to and across federal lands for pipelines; feasibility studies or other non-federal water authorized under state law, including wilderness areas and instream flows?

Answer: The BLM procedures for access to water for each of the situations in question are as follows:

| Action | |
|---|---|
| Private Diversion | Appropriation must be for unappropriated water, in accordance with State law and consistent with multiple-use management. Conveyance and storage facilities need rights-of-way or other required land-use permits. |
| Hydro Facility Siting | The developer must be in compliance with State law. The BLM would require the facility to be consistent with multiple-use management and existing appropriations. The BLM would further require an environmental assessment and appropriate land-use permits. |
| Canals | Considering water is State appropriated, these conveyances will need rights-of-way or appropriate land-use permits. |
| Transmission Lines | Would require compliance with State appropriative procedures. |

88. (Continued)

| | |
|---|---|
| Access | Must adhere to State appropriative law unless the source is a designated wild and scenic river under the Wild and Scenic River Act of 1968. In these cases, the BLM considers the right to be federally reserved and always notifies the State of this intent. |
| Rights-of-Way | It is permissible to grant a right-of-way if conveyance or impoundment structures are consistent with multiple-use management of public lands. |
| Wilderness Areas | This right is for federally reserved lands withdrawn under the Wilderness Act of September 3, 1964. |
| Instream Flows | In most cases, the BLM must adhere to State appropriative law. Instream flows on specified rivers may be federally reserved through the authority of the Wild and Scenic River Act of 1968. |

Question: In this regard, I would also like to know if there are any differences between these agencies with respect to the way they carry out oversight responsibilities under Section 404 of the Clean Water Act, the National Environmental Policy Act, and the Endangered Species Act.

Answer: The laws that you have cited are implemented under uniform rules that apply equally to our respective agencies.

QUESTIONS SUBMITTED BY SENATOR WARNER

89. Question: Last year Congress passed and the President signed into law legislation which I introduced to reauthorize the State Mining and Mineral Resources Research Institutes. The Administration's budget request does not include any money for this vital program which trains the professionals who will develop the technology needed for the competitive and profitable production and processing of our domestic mineral resources. Why did you not request any funding for the Federal share of the Mining and Mineral Resources Research Institutes?

Answer: In his statement of August 29, 1984, upon signing H.R. 4214 (now Public Law 98-409) into law, the President said that the Mineral Institute Program is no longer an appropriate use of Federal funds. The President believes that the Mineral Institute Program should be funded primarily by State and private sources. In fact, these Institutes and their universities have been successful at attracting outside funding.

During the 1970's, there was an increased need for mining engineers. For instance, following the passage of the Surface Mining Control and Reclamation Act of 1977, there was a significant increase in demand for mining engineers by industry, the Federal and State governments to achieve compliance with the detailed regulations developed to implement the Act. Further, increased regulation under mine safety and health acts increased demand for mining engineers in both government and industry. However, since these developments, the mining universities have been successful in meeting this increased demand due in part to various Federal funding sources including the Mineral Institute program.

A survey made of the thirty-one Mineral Institute Directors for the 1983-1984 academic year, indicated that there was approximately $88 million for minerals and mining research and education at their universities exclusive of the Bureau of Mines' grants to the Institutes. Of this amount, approximately $50 million is for instruction support. The allotment grants, which among other things go for scholarships and assistantship, is about $5 million or 10 percent of the National total support. Given that the need to increase the number of skilled mining engineers has been met, the loss of the Mineral Institute funding relative to all funding sources should not have a significant impact on mining and minerals educational programs.

90. Question: I was disappointed to note that the Bureau of Mine's budget request includes a $2.2 million cut in respirable dust research. Respiratory diseases being experienced by our nation's miners are resulting in intolerable costs both in terms of human suffering and in terms of black lung compensation. More than $1.5 billion is paid in black lung benefits annually. Why should we cut a research program which is helping to develop the technology that could eventually reduce the number of miners suffering from respiratory diseases and thus reduce the suffering and compensation?

Answer: Nearly 95 percent of the room and pillar operations and 85 percent of the longwall mine operations are in compliance with dust standards when silica dust is not found. The National Coal Study conducted by NIOSH shows the prevalence of "black lung" disease among coal workers to have decreased from 8 percent in 1972-73 to 5 percent in 1978. Thus, although total "black lung" benefits are continuing to increase due to past disease cases, the prevalence of the disease is decreasing.

QUESTIONS SUBMITTED BY SENATOR NICKLES

91. Question: Mr. Secretary, in May of 1984, the Office of Surface Mining assumed inspection and enforcement responsibilities as well as increased oversight of Oklahoma's coal mining regulatory program due to deficiencies in the State's program. I am very concerned about reports that OSM attempts to "outregulate" the state agency and that OSM plays a tough adversarial role toward those in the mining industry. As you can imagine, the coal industry in Oklahoma is struggling. These additional pressures from OSM only compound the problem. Could you provide for the record the amount of money OSM expects to spend in FY 85 in relation to their increased activity in Oklahoma. I would also appreciate similar estimates for FY 86.

Answer: It is neither OSM's intent or practice to "outregulate" the States, nor to play a tough adversarial role toward the mining industry in Oklahoma. OSM has implemented direct enforcement only in accordance with the appropriate permanent program provisions. No undue "pressures" or procedures have been or will be imposed by OSM.

The Fiscal Year 1985 budget includes approximately $1 million to administer inspection and enforcement responsibilities in Oklahoma. No funds are included for this purpose in the Fiscal Year 1986 proposal since our goal is to have Oklahoma resume full regulatory status by October 1, 1985.

92. Question: Mr. Secretary, the budget documents submitted to Congress assume that certain administrative and legislative steps will be taken prior to FY 1986 to carry out the proposed BLM - Forest Service Interchange. Can you outline your specific intentions for proceeding with this Interchange proposal - internal cost savings studies, public hearings, Congressional input, etc.?

Answer: The combined BLM/FS field implementation teams are currently developing internal cost savings estimates within their respective regions. Any adjustments in cost savings estimates will not be known until the end of May. A public consultation effort is being implemented to best meet the needs of interested parties and consists of workshops, open houses, and other types of meetings. There will also be consultations with congressional delegations, affected Governors, and key interest groups. Public meetings will be completed, and opportunities for public involvement will be provided before the necessary legislation to effect such a transfer is submitted. There will also be extensive consultation with Congress.

93. Question: With regard to the BLM's grazing fee study, we understand that report may again be delayed beyond the March 7 target date. When do you expect this report will be ready for Congress?

Answer: There will be a Congressional briefing on the Grazing Fee Study on March 27, 1985, and the study will be released to the public the following day. Following a public comment period and public hearings, a final recommendation will be forwarded to Congress in early summer.

94. Question: Your FY 1986 budget projects an increase of $8 million in grazing fee receipts. Can you tell me how this figure was derived?

Answer: The budget projects a total increase in grazing receipts from FY 1985 to FY 1986 of about $11 million. The $8 million represents those increased receipts that are offsetting to the Department's budget; another $3 million of the increase would flow directly to a Treasury general fund account. These are estimates made for budget purposes only. Any recommendation for changes in the grazing fee must await the completion of the FS/BLM grazing fee study and the review of public comments. Congressional action will be required before any changes take effect.

95. Question: What is the Department's target date for submitting its Wilderness Study recommendations to Congress, and are you confident that the FY 1986 funding request is adequate to meet the obligations and deadlines established under FLPMA?

Answer: The Department's target date for submitting wilderness study recommendations to the President is the deadline established in FLPMA. The Secretary will report a recommendation on all areas to the President by October 21, 1991. Recommendations on all WSA's should be made to Congress by October 21, 1993. The Bureau of Land Management informs me that the FY 1986 funding request is adequate to meet the obligations and deadlines established under FLPMA.

QUESTIONS SUBMITTED BY SENATOR EVANS

96. Question: The Columbia Basin Project Act authorized irrigation of one million acres in the Columbia River Basin, Washington. The Bureau of Reclamation is currently studying proposals to complete the irrigation project for the second half-million acres authorized by the Columbia Basin Project Act. Please describe the current schedule for completion of studies for this project, including the preparation of an Environmental Impact Statement.

Answer: The State of Washington has taken a leadership role in working with Reclamation in seeking knowledgeable decisions regarding the Columbia Basin Project. The socio-economic-institutional study nearly completed by a contractor for the Department of Ecology will provide valuable information for Reclamation's Environmental Impact Statement.

Reclamation also is working closely with State of Washington officials to develop a cost sharing agreement. The Department of Ecology study is an example of the State's willingness in cost sharing. Washington State Senate and House legislative committees are addressing the matter of future bond issues as a source of up-front funding and cost sharing.

Progress toward awarding a contract for the Environmental Impact Statement is proceeding satisfactorily. The Request for Proposals will be issued in early 1985 with the contract award expected in August 1985. Under this schedule, we expect the NEPA compliance process to lead to public hearings on a draft statement in the fall of 1986 and the final statement to be filed in June 1987. The statement will address various alternatives ranging from no further expansion to full development of the remaining 540,000 acres of the authorized project.

During the Environmental Impact Statement process, we will begin formal negotiations for a new repayment agreement that will apply to those landowners who would benefit from project construction.

Fish and wildlife interests are working with us in preparation of wildlife plans that will be included in future developments.

Question: Is money available in your FY 1986 Budget request for continuation of the study process?

Answer: Yes, there is $1,525,000 in the budget request for fiscal year 1986 which includes funds for work on the environmental statement.

Question: Please describe in detail funding requests and schedules for completion of this process.

Answer: The funding needed to complete the study process includes the following:

1985 - $700,000
1986 - $1,525,000
1987 - $1,575,000

Under this funding arrangement, the final environmental statement would be filed in Junes 1987.

97. Question: Congress passed legislation during the 98th Congress to authorize and fund construction of fish passage facilities at irrigation and hydroelectric dams in the Yakima River Basin, Washington. Please describe in detail funding requests and construction schedules for each of the fish passage facilities authorized by this legislation. Please identify the completion dates for each project.

Answer: The information is shown in the table following.

97. (Continued)

YAKIMA FISH PASSAGE AND PROTECTIVE FACILITIES PROGRAM

| PROGRAM ITEM | ESTIMATED TOTAL | FY 1985 PROGRAM | FY 1986 ESTIMATE | Begin CONSTRUCTION | Complete CONSTRUCTION |
|---|---|---|---|---|---|
| Sunnyside Diversion Dam.................. | $ 5,018,000 | $ 3,957,000 | $ 627,000 | 8-84 | 12-85 |
| Wapato Diversion Dam..................... | 5,689,000 | 2,634,000 | 3,008,000 | 11-84 | 4-86 |
| Old Reservation Canal.................... | 260,000 | --- | 190,000 | 4-88 | 6-88 |
| Toppenish Creek/Satus Unit............... | 1,855,000 | 690,000 | 1,165,000 | 7-85 | 2-86 |
| Prosser Diversion Dam.................... | 8,150,000 | 1,165,000 | 3,155,000 | 7-85 | 3-87 |
| Roza Diversion Dam....................... | 6,570,000 | 360,000 | 445,000 | 10-85 | 3-87 |
| Roza Powerplant Wasteway................. | 580,000 | 70,000 | 450,000 | 9-85 | 12-85 |
| Easton Diversion Dam..................... | 4,290,000 | --- | 180,000 | 10-86 | 3-88 |
| Horn Rapids Diversion Dam................ | 1,326,000 | 1,177,000 | --- | 3-85 | 8-85 |
| Town Diversion Dam....................... | 315,000 | --- | 123,000 | 7-86 | 3-87 |
| Stevens Ditch............................ | 15,000 | --- | --- | 8-87 | 11-87 |
| Naches-Cowiche Diversion Dam............. | 502,000 | 438,000 | --- | 11-84 | 4-85 |
| Marion Drain Diversion................... | 150,000 | --- | 110,000 | 8-87 | 3-88 |
| Westside Ditch........................... | 260,000 | --- | --- | 10-87 | 3-88 |
| Taneum Diversion Dam..................... | 215,000 | --- | --- | 9-87 | 2-88 |
| Snipes/Allen Canal....................... | 110,000 | --- | --- | 7-87 | 2-88 |
| Satus Creek Diversion Dam................ | 130,000 | --- | 75,000 | 6-86 | 12-86 |
| Thorpe Mill Diversion Dam................ | 300,000 | --- | --- | 9-87 | 2-88 |
| Toppenish Creek Diversion Dam............ | 270,000 | --- | 210,000 | 9-86 | 3-87 |
| Wapatox Diversion Dam.................... | 75,000 | --- | --- | 10-86 | 3-87 |
| Total.................................... | $36,080,000 | $10,491,000 | $ 9,738,000 | | |

98. Question: In the fiscal year 1985 Energy and Water Development Appropriations Act, Congress provided $4.8 million to the Bureau of Reclamation for construction of fish passage facilities at Prosser Diversion Dam and Roza Diversion Dam and Powerplant. Please describe activities planned or underway at these facilities. Will unexpended amounts from the fiscal year 1985 Appropriations be carried over for the Prosser and Roza Projects?

Answer: During fiscal year 1986, construction work will be completed on the fishway at Sunnyside Diversion Dam, fishway and screen structure at Wapato Diversion Dam and Toppenish Creek/Satus Unit Diversion, and on the fish barrier at Roza Powerplant Wasteway. Construction will continue on the fishway and begin on the screen structure at the Prosser Diversion Dam. Preconstruction will continue on the Roza Diversion Dam. Construction will begin on the screen structure on the Old Reservation Canal, on the fishway and screen structure at Town Diversion Dam, Satus Creek Diversion, and Toppenish Creek Diversion Dam. Work will begin on the Marion Drain Diversion.

Funds will available from fiscal year 1985 for the Prosser and Roza features of the Project.

99. Question: Public Law 96-162 authorized the Bureau of Reclamation to study the feasibility of additional water storage facilities on the Yakima River Basin, Washington.

Please describe in detail the current status of the feasibility study and funding requests for completion of the study.

Answer: The preliminary study phase, or Phase 1, of the study is complete. A 1982 Phase 1 report provided an overview of water needs, issues to be resolved and potential water supply measures. Three early action elements emerged from Phase 1--construction of a reregulating facility on the Yakima River, a fish facilities improvement project on the Yakima River, and establishment of a waterbanking program. Construction of fish facility improvements is underway. The reregulating dam and waterbank proposals are under consideration by the state.

The second study phase--plan formulation and selection--is underway. Streamflow enhancement and supplemental irrigation needs have been quantified, and new irrigation development opportunities on the Indian reservation have been identified. The effectiveness of nonstorage and storage measures to meet needs is being evaluated.

A status report is now being prepared to discuss different combinations of storage and non-storage measures to meet all or part of the basin's water needs. Results will be available for public discussion this spring, and consensus on a preferred development plan is anticipated this fall.

A mix of storage and nonstorage elements is likely in the preferred plan if basin fishery and agricultural water needs are to be met. When a preferred plan is identified, detailed evaluations will be completed on that and a planning report and environmental statement prepared for formal public review and congressional consideration for construction authorization. These documents will be completed in 1986.

The $277,000 requested in fiscal year 1986 will be used to complete detailed engineering designs and cost estimates and economic, social, and environmental effect evaluations of the preferred plan of development and prepare the planning report and environmental statement.

Question: Please describe in detail any analysis of non-storage potential for additional water supplies on the Yakima River basin.

Answer: Nonstorage potentials include acquisition of agricultural easements; improvements in carriage system efficiency and onfarm water use such as canal linings, better pumping systems, and water scheduling; ground-water development; and weather modification to increase precipitation in drought years. A primary concern being addressed in plan formulation is how much of the theoretical nonstorage potential can be realistically developed in view of legal, institutional, and economic constraints. It is anticipated that a "core" of the most probable nonstorage possiblities can be proposed with public acceptance and combined with the best storage measures to meet basin needs. Reclamation is working with the Soil Conservation Service, irrigation district managers and others to fully consider and incorporate nonstorage potentials in the plan.

99. (Continued)

**Question: Please provide me with a copy of any reports the Bureau of Reclamation has done on the subject of non-storage potential on the Yakima River system.**

Answer: Two reports provided to Senator Evans are the "Yakima River Basin Water Enhancement Project (YRBWEP) Study Team Evaluations of Nonstorage Alternatives" and "Preliminary Assessment of Waterbanking and a Water Supply Market as Part of the Yakima River Basin Water Enhancement Project."

# YAKIMA RIVER BASIN WATER ENHANCEMENT PROJECT (YRBWEP)
# STUDY TEAM EVALUATIONS
# OF NONSTORAGE ALTERNATIVES

The study team has conducted workshops on nonstorage potentials, and these activities are summarized in the attached January 1984 and April 1984 YRBWEP newsletters. Subsequent to the workshop activities, the YRBWEP study team made a preliminary evaluation of nonstorage alternatives and summarized this evaluation in the attached January 1985 report. The study team is continuing to update its evaluation as it proceeds into plan formulation. A planning status report to be completed in the spring of 1985 will discuss the effectiveness of various ranges and combinations of nonstorage and storage measures in meeting basin water needs.

SUBJECT TO REVISION

SUMMARY OF NONSTORAGE POTENTIALS

| Nonstorage Alternative | Critical Year Yield (acre-feet) | Construction Cost | Operation and Maintenance Costs (present worth)[1] | Cost Per Acre-Foot of Critical Year Yield |
|---|---|---|---|---|
| Acquire agricultural easements | 100,000 | -- | -- | $150-$700[2] |
| Acquire water rights | 100,000 | -- | -- | $800-$2,000[3] |
| Improve carriage system and operating efficiency | | | | |
| (a) Canal lining | 32,000+ | -- | No change | $360-$650[4] |
| (b) Water reuse | 31,000+ | -- | -- | $70-$205[5] |
| (c) Vegetation and debris removal | [6] | [6] | [6] | [6] |
| (d) Replace hydraulic turbines | 1,600+ | $320,000 | $517,000 | $520 |
| (e) Repair checks and gates | [6] | [6] | [6] | [6] |
| Improve onfarm water management | 150,000-<br>165,000 | -- | -- | $155-$280[7] |
| Increase ground-water development | 60,000+ | $11,200,000 | $9,100,000 | $340 |
| Weather modification | 30,000-<br>115,000 | -- | $2,000,000<br>$5,000,000[8] | $20-$170 |

SUBJECT TO REVISION

[1] Evaluated at 8-5/8 percent.
[2] Evaluation based on production value of land.
[3] Evaluation based on property values.
[4] Analysis depends not only on construction cost but also on loss per mile.
[5] Costs must be determined on a case-by-case basis.
[6] No information available at this time to perform analysis.
[7] Major costs are annual costs for operation and maintenance. Present worth of all costs are used in the analysis.
[8] Costs for weather modification were developed assuming all services would be contracted.

**YAKIMA RIVER BASIN WATER ENHANCEMENT PROJECT**

Phase 2, No. 6

**YRBWEP**
FEASIBILITY STUDY

# NEWSLETTER

January 1984

## NONSTORAGE ALTERNATIVES

A workshop on nonstorage alternatives was held on November 30, 1983, in Selah, Washington. The purpose of the workshop was to identify as many nonstorage alternatives as possible to meet or help meet the water resource needs of the Yakima River basin. Attendance at the workshop was by invitation. We invited those who responded to the last newsletter and asked to be included in the workshop. We also invited some who represented a cross section of interests and who had been active in the enhancement project to date. Those attending included representatives of both large and small irrigation entities, members of the agribusiness community, and property owners at Cle Elum lake and the Teanaway River basin. Although invited, few members of the environmental community were able to attend; therefore, the range of ideas presented may not have been as complete as would have otherwise been possible.

### Ideas on Nonstorage Potentials

We want to thank those who responded to our last newsletter. Their ideas were used during the workshop to help generate additional ideas. We grouped all the ideas into several categories and consolidated the ideas into a list which is attached to this newsletter.

### More Information on the Workshop

If you would like more information on the November 30 workshop, we will send, upon request, a copy of our workshop summary. You may use the attached comment sheet to make your request.

### Panel Discussion

At the close of the workshop, a five-member panel (representative of those in attendance and selected by us) gave their initial reactions to many of the ideas that were presented at the workshop. The panel's comments will provide us with some direction as we begin the process of evaluating nonstorage potentials.

### What Is Next

We will collect pertinent data, estimate costs, and study the technical ideas presented at the workshop. People with the needed expertise will be consulted to acquire indepth information on specific ideas.

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Because of the quantity and quality of ideas generated, we have decided to form a task force to help us evaluate ideas that require institutional change or action (such as change in water rights law, agency policy, or administrative procedures). The task force will be formed of experts who have a wide variety of backgrounds and have experience and knowledge of the institutional issues.

Since we have decided to form a task force to help us evaluate the institutional ideas from the first workshop, the second workshop on nonstorage alternatives will not be ~~held until mid- to~~ late February. The purpose of the second workshop will be to provide additional evaluation of ideas identified at the first workshop. Those participating in the second workshop will be given technical and institutional evaluations available at the time. Participants will be asked to add to the evaluations from their personal knowledge. Once the evaluation is complete, the workshop participants will offer guidance to the study team on which ideas appear to warrant further detailed study.

## How You Can Participate

As we begin the process of evaluating the ideas on nonstorage potentials, there are several ways you can help. While we have received general information on ideas in the past, we now need specific information on features and facilities which can be improved, repaired, and modified to reduce water losses. Examples may be locations of high leakage from canals, areas to replace open canals with pipe, and similar information. We would also like to hear your thoughts on the problems or obstacles associated with implementing ideas in the attached list, and we would like your ideas on how those problems or obstacles could be overcome. You may use the attached response form to provide us with the above or any other information.

## INSTREAM FLOWS

A contract to recommend instream flows for use in YRBWEP was awarded to Parametrix, Inc., of Bellevue, Washington. Parametrix will use existing instream flow data and the Instream Flow Incremental Methodology to develop the instream flow recommendations. Dr. Donald Weitcamp will be Parametrix's project manager, and Dr. Tim Hardin will be performing most of the technical work. Dr. Hardin was associated with development of the Instream Flow Incremental Methodology and is a respected authority on the subject.

Work on ~~developing~~ instream flow recommendations has been delayed by about 30 days due to difficulty in obtaining all of the raw data. As a result, initiation of activities by the Instream Flow Technical Advisory Group (IFTAG) will be delayed. Most of the agencies involved with IFTAG have already appointed staff to the group.

## STORAGE ALTERNATIVES

We are continuing our efforts to obtain additional information on the Cle Elum Lake enlargement and Swauk Creek potentials as requested by the directors. A survey crew has been in the Cle Elum Lake area to collect information on potential impacts to property and improvements along the shoreline. Completion of the data collection was delayed due to adverse weather conditions. At Swauk Creek the Washington State Department of Game is gathering additional information about impacts to big game and the potential for mitigation.

A drilling crew has been working at the Horsetail and Wymer sites. Drilling is necessary to gather subsurface geological information for use in preparing cost estimates. New cost estimates based on new and more detailed information will be prepared for all damsites still under study.

## STUDY TEAM TELEPHONE NUMBERS

If you want to discuss any aspect of the study with us, we can be reached at one of the telephone numbers listed below. We are usually in the office between 6:30 a.m. and 3:30 p.m. Pacific time.

1. (509) 457-0875--Yakima Commercial Number
2. (208) 334-1105--Boise Commercial Number
3. 554-1105--Federal Telecommunications System

## ATTACHMENT

### Nonstorage Ideas from Newsletter Responses and the November 30 Workshop

I. Technical Ideas

- A. Suggestions Pertaining to the Delivery System
    1. Modernize the canal system through lining canals, piping laterals, etc.
    2. Reuse spilled drainage with relift pumps
    3. Pressurize parts of the system where appropriate
    4. Repair substandard gates and canals to reduce leakage
    5. Eradicate vegetation and obstructions in the canals
    6. Install pumps to utilize the "dead pool" in reservoirs
- B. Suggestions Pertaining to Onfarm Operation and Practices
    1. Encourage the installation of drip or improved sprinkler systems
    2. Install more piped systems
    3. Produce crops that consume less or little water
    4. Level lands where possible to reduce runoff
    5. Maintain a portion of the land that can be fallowed in water-short years
    6. Provide irrigators with information on the minimum and optimum amount of water desirable for maximum crop yields. Promote soil moisture testing. Promote use of irrigation management system (scheduling water to meet crop consumptive use) as a management tool.
    7. Change cropping and harvesting patterns to allow more flexible and efficient use of water
    8. Promote more efficient water use through soil moisture testing
    9. Promote preseason irrigation during periods of floodflows
    10. Install measuring and regulating equipment on individual farm units to monitor water use
    11. Reduce irrigated acreage

12. Schedule water delivery to the farm only on an "as needed" basis
13. Award cash prizes and recognition to efficient water users for those who have made the greatest gain in efficiency improvements

C. Suggestions Pertaining to Financial Arrangements and Incentives

1. Provide Federal funding for rehabilitation of district irrigation systems
2. Provide incentives for water conservation by users. Set assessments for water on a small allotment and then have ratcheting price increases for increasing use (or a sliding scale basis).
3. Increase Federal funding to soil conservation districts for modernization of systems and developing more efficient water management programs
4. Determine replacement costs for water and pay irrigation districts and/or farmers for water not used
5. Reimburse irrigation districts for conservation improvements
6. Promote drought insurance for use in low water years

II. Institutional Ideas

A. Suggestions Pertaining to Changes in Administration Practices

1. Manage the water resources of the area in a basinwide plan under a single water authority with which the irrigation districts may be affiliated
2. Keep instream flows for fish at minimum levels to provide more water for irrigation
3. Consolidate irrigation districts when efficiency gains could be realized
4. Develop a high accuracy early warning system for impending drought
5. Eliminate unauthorized use of water
6. Include return flows as part of the water allotment of a user or district

B. Suggestions Pertaining to Changes in Legal Requirements and Contracts

1. Change law to allow irrigation districts to sell and/or transfer water to other districts
2. Create a waterbank to acquire and sell surplus water and allocate the supply

3. Adjudicate the water rights of users and requantify needs
4. Allocate water based upon average use rather than the 1945 Consent Decree to create an incentive to conserve
5. Remove Government impediment and litigation such as the Aquavella litigation and Quackenbush order
6. Allow temporary and emergency transfer of water without loss of water right
7. Allocate water to those districts which have a proratable water supply, using specific crop needs within a district as the basis for allocation

C. Suggestions Pertaining to Other Approaches to Increase the Water Supply

1. Manage the watershed and snowpack to increase natural water retention
2. Implement cloud seeding and other weather modification techniques to increase rainfall in the area
3. Draw water from the underground aquifer and recharge it with floodflows
4. Dig well to supply supplemental water
5. Build numerous small dams and ponds on small tributaries rather than a large reservoir
6. Construct a canal to access Columbia River water
7. Promote "water harvesting" technology (e.g., condensors for stock water)
8. Reduce reservoir losses by reducing seepage and evaporation
9. Manage forest harvesting to delay snowmelt
10. Pump dead storage

YAKIMA RIVER BASIN WATER ENHANCEMENT PROJECT

YRBWEP
FEASIBILITY STUDY

Phase 2, Number 7

# NEWSLETTER

April 1984

## Nonstorage Alternatives

Our January 1984 newsletter summarized the nonstorage ideas that had been developed in the November workshop. Also in that newsletter we stated that we would form a taskforce to help evaluate nonstorage potentials. The evaluation would address where similar measures had been tried, how effective they were, what problems or considerations must be made in implementing the measures, and the potential for success in the Yakima River basin. The panel was requested to focus on nonstorage potentials with other than structural solutions (e.g., canal lining).

We selected the following as members of our panel or task force to evaluate nonstorage potentials:

Craig Bell, Executive Director, Western States Water Council
Milo Bell, Department of Fisheries, University of Washington
Toby Clark, Water Project Director, Conservation Foundation
Charles Corker, University of Washington School of Law
Steve Levy, Agricultural Conservation Program Manager,
    Bonneville Power Administration
Marion Marts, Department of Geography, University of Washington
Elmer McDaniel, A and B Irrigation District, Idaho
Jerry Meral, Former Deputy Director, Department of Water Resources,
    State of California
John Spencer, Deputy Director, Washington State Department of Ecology
Wes Steiner, Director, Department of Water Resources, State of Arizona
Jim Waldo, Northwest Water Resources Committee

The ideas from the November workshop were arranged into several groups which appeared to have similar characteristics. The panel then discussed the ideas by group and addressed the capability and acceptability of each idea generated in the November nonstorage alternatives workshop. Also identified were several new ideas and new ways for implementing some of the previously identified ideas. The panel completed their evaluation by discussing how the ideas could be combined into incentive or regulatory plans.

Our next step is to evaluate the nonstorage ideas for which benefits and effects can be quantified. To perform this evaluation we will first develop a methodology for quantifying the impacts. Once the methodology is agreed upon, we will quantify the impacts and then develop fact sheets for each idea. The fact sheets will address how the idea may be implemented, what the constraints to implementation may be, and what the results of implementation may be to the water supply of the basin.

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When the fact sheet are complete, we will hold a second public workshop to review our findings. After that workshop we hope to be able to identify which ideas are the most acceptable and which ideas should be eliminated from further study. We will present our recommendations to the two directors for a decision on which ideas should be kept in the study for detailed evaluation.

## Instream Flows

Parametrix, Inc. is continuing to review the basin instream flow data. Most of the data from previous instream flow studies has been made available to Parametrix. Their first task has been to review all of the field data and determine how well the data complies with the requirements of the Instream Flow Incremental Methodology (the methodology most widely accepted for establishing instream flows). When their review of the field data is completed, Parametrix will develop recommended instream flows.

The first meeting of the Instream Flow Technical Advisory Group (IFTAG), which will also develop recommended instream flows, is scheduled for April 19 at the Yakima County Courthouse, room 232. IFTAG is composed of fishery biologists from Federal and State fishery agencies and the Yakima Indian Nation, and a fishery biologist representing several irrigation districts. The public is invited to attend the meeting, which will start at 9:30 a.m., and to view the advisory group deliberations. Time will be made available at the end of the meeting for public comment.

## Fish Passage and Protective Facilities

Improvement of the basin's fish passage and protective facilities (ladders and canal screens) was identified in Phase 1 of the Enhancement Project as an early action item. The Bureau of Reclamation entered into a contractual arrangement with the Bonneville Power Administration in October 1983 to provide preliminary designs and cost estimates on several Federal diversions. Predesign information on four of the sites was recently provided to the BPA Administrator. The sites discussed were Sunnyside Diversion Dam, Wapato Diversion Dam, Old Reservation Canal, and Toppenish/Satus Unit Diversion. Construction may begin as early as the fall of 1984 on fish ladders at the Sunnyside and Wapato Diversion Dams. In addition, the State of Washington through the Department of Ecology is funding design and construction of a fish ladder at Horn Rapids diversion dam.

## East Selah Reregulating Reservoir

The East Selah reregulating reservoir was identified as an early action item in Phase 1. The State of Washington has retained CH2M-Hill to review all previous work on the reregulating reservoir to determine if the facility remains a cost effective alternative. The reregulating reservoir would be used to improve system operations and reduce operational spills. If proven to be cost effective and if appropriate Federal legislation is passed, the State will fund design and construction of the facility.

## YRBWEP Related Legislation

In 1983 the Washington State Legislature passed legislation (H.B. 595) authorizing $14.5 million for construction of the East Selah reregulating reservoir. A provision of the legislation stated that before construction could begin, the Federal government would need to pass legislation crediting State expenditure for the East Selah facility as part of State cost sharing that may be required for the entire Enhancement Project.

Two bills are now in Congress, S1027 and HR653, that include the cost crediting provision. The bills also address other issues necessary for implementation of the East Selah reregulating reservoir and fish passage and protective improvements.

## Storage Alternatives

The Bureau of Reclamation has retained International Engineering Company to review previous studies on the potential of the Swauk Creek storage site. International's work is one part of our reconsideration of the Swauk Creek site to determine if the site should be reincluded in the list of storage potentials under active considereation. The U.S. Fish and Wildlife Service and Washington State Department of Game have submitted a letter report to us detailing the environmental impacts expected with development of the Swauk Creek site. We will assemble the information and submit our recommendation on the site to the directors in May 1984.

Our contract with International Engineering Company also requested a review of the potential to utilize the "dead storage" at Cle Elum Lake. The dead storage consists of the storage in the natural lake that existed prior to construction of the Cle Elum dam and which cannot now be used with the existing outlet works. To utilize the dead storage would require addition of either a tunnel or a pumping facility. We are currently studying the potential monetary and social impacts to the residents along and in the vicinity of the lake from both use of dead storage and raising of the maximum lake elevation. When our studies are completed, we will forward our recommendations to the directors for their decision.

Snow and weather conditions forced a stop to drilling operations last December at the Horsetail and Wymer storage sites. The drilling is necessary to gather subsurface geological information for use in preparing better cost estimates on these two facilities. The drill crews will be back at the Wymer site on April 16 to complete drilling. The drill crews will then move to the Horsetail site.

Unpublished

SUBJECT TO REVISION

# NONSTORAGE ALTERNATIVES EVALUATION SUMMARY
January 1985
Yakima River Basin Water Enhancement Project

## Introduction

### Purpose

The purpose of the nonstorage alternatives evaluation was to identify potential nonstorage measures and to evaluate those at a level comparable with the evaluation of potential storage elements. Ideas applicable to the Yakima River basin were evaluated, and the most promising measures will be considered as potential plan elements during plan formulation.

### Organization of Results

The results of the nonstorage evaluation are presented in three sections: (1) a list with explanatory notes for all nonstorage ideas for which a fact sheet was not prepared, (2) a list with explanatory notes of all evaluted nonstorage ideas presented in fact sheets including a discussion of how the ideas were grouped, and (3) a summary of the fact sheets for all of the groupings of ideas evaluated.

### Evaluation Procedures

Only readily available data was used for the evaluation. Although some nonstorage ideas have been identified for some time, the information necessary to evaluate those measures on a basin wide application is not available. In instances where data was available to evaluate a specific application, we evaluated that application for cost and yield using the available data. If the idea's cost per unit of yield was less than $1000 per acre-foot, we carried the idea forward even though we were unable to estimate the total potential yield for basinwide application ($1000 per acre-foot was the criteria used for eliminating on a cost basis storage alternatives with low hydroelectic power potential during storage site screening).

Yields shown are equivalent storage yields. The equivalent storage yields were based on system operation studies. Yields are often quite different from the reduction in irrigation diversions, since the yield is influenced by site in the system and time during the irrigation season when the savings occur. For example, if a reduction in diversion occurs when storage is full and river flows are high, the yield could be zero.

### Interpretation of Results

Reviewers should be warned against adding up yields for each of the ideas and assuming the total represents the total potential yield for nonstorage alternatives. The actual total yield from application of all the nonstorage measures would be less than the sum total of the yields estimated for each individual measure.

Equivalent storage yield for nonstorage alternatives will likely increase with increased storage. Changes in system operation (e.g., meeting increased instream flows) will also change the potential yield for most nonstorage ideas. Nonstorage alternatives yield more water in critical water years (when the water is most needed) than they do in average or above average water years due to the greater availability of reservoir storage.

## SECTION I

## IDEAS NOT INCLUDED IN A FACT SHEET

SUBJECT TO REVISION

### Nonstorage Ideas

Water banking is a nonstorage idea identified in Phase 1 as a potential plan element. While water banking will not directly provide additional water to the basin, it could furnish a mechanism for redistributing (transfering) existing water supplies that may become available through conservation or otherwise. Water banking is also a possible method for distributing new storage water that may be provided through the Yakima River Basin Water Enhancement Project (YRBWEP). The potential of water banking as part of the YRBWEP will be given full consideration when implementation plans are developed for any project that is proposed as a result of this study. Detailed information and evaluation of the potential for water transfers in the Yakima basin can be found in "Report on Water Banking: A Preliminary Assessment of Water Banking and Water Supply Market as Part of the Yakima River Basin Water Enhancement Project." The report can be obtained from the Washington State Department of Ecology. As a result, a fact sheet was not prepared for water banking.

Other ideas which were not included in a fact sheet and the reasons they were dropped from further evaluation are stated below.

1. BUILD NUMEROUS SMALL DAMS AND PONDS ON SMALL TRIBUTARIES RATHER THAN A LARGER RESERVOIR. This idea, which is a storage idea rather than a nonstorage idea, was made during the storage alternatives analysis. We eliminated this idea from consideration primarily because of high costs.

2. CONSTRUCT A CANAL TO USE COLUMBIA RIVER WATER. While not a storage idea per se, we evaluated this idea with the storage ideas. We dropped this potential because of high construction and power costs.

3. MAINTAIN WATER LEVELS FOR FISH FLOWS AT MINIMUM LEVELS. Parametrix, Inc. and the Instream Flow Technical Advisory Group evaluated the instream flow needs, and each provided instream flow recommendations to the study team. After considering their recommendations, agency comment, and public comment, we developed instream flow objectives for the YRBWEP study. One of the primary objectives of the YRBWEP is to meet instream flow needs for aquatic life.

4. PROMOTE WATER HARVESTING TECHNOLOGY. Water harvesting, condensing water from the air, appears to be a valuable small technologies measure but is not applicable to large scale water needs.

5. PUMP DEAD STORAGE. The study team is evaluating use of dead storage in existing reservoirs as part of the storage alternatives analysis, e.g., Cle Elum Lake.

6. REDUCE RESERVOIR LOSSES BY REDUCING SEEPAGE AND EVAPORATION. Seepage at existing reservoirs is minor and helps to meet instream flow requirements below the reservoirs. Cost effective and environmentally acceptable methods of reducing evaporation at reservoirs are not available at this time.

7. CENTRALIZE WATER RESOURCE MANAGEMENT AUTHORITY. Water resource management is now largely centralized in the Bureau of Reclamation's Yakima Project Office which operates the river-reservoir system in the basin. While a completely centralized management system may make the system operate more efficiently, quantifying potential water savings or water yield is impossible at this time. We will address centralizing management when developing a basinwide water management plan.

8. REMOVE GOVERNMENT IMPEDIMENTS AND LITIGATION SUCH AS AQUAVELLA LITIGATION AND QUACKENBUSH ORDER. Adjudication will help establish legal water duties for each irrigator and will settle the issue of water right priority. Washington State intends to continue the adjudication. Judge Quackenbush's order to release storage water to protect the fishery was issued in the case involving the 1945 Consent Decree. The authority for protection of the fishery stems from the decisions in the Indian fishery cases involving west slope waters. The YRBWEP would result in increased flows for fishery purposes and reduce the possiblity of further court proceedings dealing with Yakima River waters.

9. DEVELOP A HIGH ACCURACY, EARLY WARNING SYSTEM FOR IMPENDING DROUGHT. Preliminary discussions with experts in water supply forecasting indicate the Yakima River basin forecast system is the best currently available. Improving forecasts will not yeild water to meet water needs. Improvements in disseminating and interpreting forecasts may reduce economic and social disruption. We will address improving the use of forecasts when developing the basinwide water management plan.

10. QUANTIFY ALL RETURN FLOWS TO THE RIVER. The Federal Yakima Project has quantified return flows by river reach and considers these flows as part of the total water supply available for irrigation. We used return flows to quantify the water resource base.

11. DEFINE (QUANTIFY) ALL WATER RIGHTS WITHIN THE YAKIMA RIVER BASIN. The State's adjudication will establish water rights for all water used in the basin. In setting the water rights Washington State will quantify amounts, identify points of diversion, define the areas of use, describe the beneficial uses, and determine the seniorities.

12. QUANTIFY ALL WATER DIVERSIONS BY DIVERSION POINT. The amount of water taken at most diversions is known. The adjudication will more closely define the diversion rights, especially for those with natural flow rights.

13. CONSOLIDATE IRRIGATION DISTRICTS. Combining operations of irrigation entities in the basin may save water. Quantifying savings is extremely difficult. We will consider consolidating districts when preparing the water management plan for the basin.

14. PREIRRIGATE USING EARLY SEASON FLOOD FLOWS. Irrigators presently use early season flood flows when possible. Preirrigation is useful only when a soil's capability to hold moisture (field capacity) has not been reached. Since fields are usually at field capacity in the spring, preirrigation is not normally beneficial.

## Incentive Ideas

We determined that several nonstorage ideas are more accurately called incentives. Incentives do not, by themselves, result in increased water supply, but incentives, when used with various nonstorage ideas, make those ideas more appealing and improve the potential for implementation.

We did not evaluate the incentive ideas at this time. Any plan with nonstorage ideas will include one or more incentive ideas to facilitate implementation. Below is a listing of possible incentives developed at the workshop.

1. Use added power revenues from increased fish flows to help pay for conservation measures.

2. Provide tax credits for efficient water use or for making improvements to conserve water.

3. Allow spreading of water gained through conservation to previously dry land.

4. Create economic incentive by identifying conservation elements that increase an irrigator's profit.

5. Use added power revenues from conservation measures to help pay for water conservation measures.

6. Improve on-farm management through ideas such as tax breaks, low interest loans, State bonds, or conservation loans or grants.

7. Help irrigators with on-farm water management.

8. Award cash prizes and recognition to efficient water users or to irrigators making the greatest gain in efficiency.

9. Provide Federal funding for rehabilitation of district irrigation systems.

10. Increase Federal funding to soil conservation districts to modernize systems and develop more efficient management programs.

11. Determine replacement costs for water and pay irrigation districts and/or farmers for water not used.

12. Reimburse irrigation districts for conservation improvements.

13. Eliminate unauthorized use of water.

14. Enforce water rights in the basin.

15. Place a tax on all water use.

16. Set assessments for water on a small allotment and then have ratcheting price increases for increasing use (i.e., a sliding scale).

## SECTION II

## GROUPING OF NONSTORAGE IDEAS THAT WERE INCLUDED IN FACT SHEETS

SUBJECT TO REVISION

Many of the ideas suggested at the Nonstorage Alternatives Workshop held in Selah were similar. We grouped similar ideas to simplify evaluation. A table summarizing how the nonstorage ideas were grouped follows.

### GROUPING OF NONSTORAGE IDEAS

### Acquire Agricultural Easements

1. Acquire easement rights for supplemental water supply during water short years.
3. Change cropping and harvesting patterns to allow more flexible and efficient use of water.
9. Maintain a portion of land that can be fallowed in water short years.
13. Produce crops that consume less or little water.
17. Pursue interruptable water contracts.

### Acquire Water Rights

2. Acquire water rights as a long term process in lieu of new storage.
16. Purchase irrigation water rights to supplement water for instream flows.
18. Reduce irrigated acreage.

### Drought Insurance

26. Provide compensation to irrigators suffering financial losses during a drought through an insurance program.

### Improve Carriage Systems and Operating Efficiency

5. Eradicate vegetation and obstructions in the canals.
12. Pressurize parts of the conveyance system.
19. Remove operational constraints to allow diversion of less water.
20. Repair gates, checks and other facilities to improve operating efficiency.

### Improve On-farm Water Management

6. Deliver water on-farm only on an as needed basis.
7. Level lands where gravity irrigation is used.
8. Line laterals or replace laterals with pipe on farms.
14. Provide irrigators with information on minimum and optimum amounts of water for maximum crop yields or maximum economic return.
21. Use drip or improved sprinkler systems.
22. Use farm pump-back systems.
23. Use gated pipe for gravity irrigation.
24. Use irrigation management service (IMS).
25. Use soil moisture testing to schedule water deliveries.

SUBJECT TO REVISION

### Improve Watershed Management

10. Manage forest harvesting to delay snowmelt.
11. Manage the watershed and snowpack to increase natural water retention.

### Increase Ground Water Development

4. Dig wells to supply supplemental water.
15. Pump water from the underground aquifer and recharge the aquifer with flood flows.

### Weather Modification

27. Increase precipitation by seeding cloud formations.

# REPORT ON WATERBANKING

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## Preliminary Assessment of Waterbanking and a Water Supply Market as Part of the Yakima River Basin Water Enhancement Project.

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by
Steve Mitchell

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# INTRODUCTION

Literature pertaining to waterbanking is almost nonexistent. Most of the work done on waterbanking studies is restricted to agency-staff evaluations and other "in-house" memoranda and reports originating in other states, and which are difficult to come by. The small amount of literature that is available was completed prior to any extensive waterbanking experience and the contents tend to be theoretical and abstract.

This work was conducted to obtain some idea of the practicality and viability of waterbanking as a measure to help promote efficient water operations in the Yakima Basin. Waterbanking and its role in a water supply market is presented in this report for assessment as a potential plan element of the Yakima River Basin Water Enhancement Project.

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# DEFINITIONS AND ASSUMPTIONS

1. The term "waterbanking" as used here represents a centralized mechanism for expediting the transfer of equity interests in water, either via market forces or by some other equitable means for pricing the water to be transferred. Many different kinds of equity transfers and equity exchanges would be possible under this concept.

2. The water market concept is reliance on the market mechanism to permit the transfer of water from one user to another or from low valued uses to higher valued ones. Thus, a market would consist of buyers and sellers, an available supply of water to meet demand, and an accessible supply, . . . all resulting in transactions being conducted. In some cases, as will be explained later, a "free market" for the price of water could be modified by a pricing mechanism or formula agreed upon by the market participants.

3. While the water bank would be a supplementary institution for facilitating market water transfers, it does not replace the existing water management institutions in their functions in water allocation. Existing legal water rights, water use, and transfer procedures, as provided in the Washington State Water Code, may be modified but would not be endangered by the water supply bank, its administration, or its operational procedures.

   The water bank would have interactions with existing local water management and delivery organizations and individual water right holders and water users. These interactions would have to be mutually beneficial as the utilization of banking services would be voluntary, and most of the administrative and operating functions would be in the form of appendages to existing responsibilities of water management agencies.

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## OBJECTIVES

Waterbanking has the following objectives:

1. Increase the level of information and awareness between entities desiring to purchase or sell water interests.

2. Encourage the most efficient duty for beneficial use from water.

3. Facilitate the transfer of water from one user to another.

4. Provide an accessible market for water found in excess of needs of private users.

5. Provide added flexibility to the administration and allocation of water resources.

6. Encourage water sharing notwithstanding the relative priorities of the involved water rights.

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## JUSTIFICATION

For a water supply bank to be justified it must demonstrate advantages to the public in most or all of the following ways:

1. By increasing the level of information and awareness between entities desiring to purchase or sell water interests.

2. By leading to a system more responsive to economic considerations.

3. By overcoming present legal and institutional constraints to water transfers.

4. By being a powerful enough incentive to dissolve long established attitudes against transfer of water.

5. By providing legal protection against possible loss of water rights due to transfer activities.

6. By allowing those with protected water rights to capture the benefits of those rights while allowing the water itself to be used more efficiently.

7. By lessening market distortions that occasionally occur when information about supply options and user potential is limited.

8. By resulting in increased social benefits obtained by more "optimum" water transfers.

9. By bringing more buyers and sellers into a centralized "auction" so as to reduce the individual cost to search out prospective buyers or sellers, and also increase the likelihood of finding the "highest bidder."

10. By providing a greater array of supply options to choose from, thereby fostering a more cost-effective and resource efficient matchup between buyers and sellers of water than presently exists.

11. By significantly reducing the time and expense presently involved in negotiating and completing water transfers.

12. By providing the means for those who conserve water to benefit from the effort of their conservation by being able to sell their excess water for "profit" in a water supply market.

Unless a water supply bank can provide at least most of the values, services, and improvements listed above, it could not be assessed as a viable program.

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# ROLE
# OF THE
# WATER SUPPLY BANK

A water supply bank could have any or all of the following functions:

1. As an informational "pool" . . . by assembling information about water availability and water need and making such information broadly available for the use of those wanting to buy or sell water and water rights.

2. As market facilitator and "broker" in arranging and expediting water transfers between negotiating parties.

3. As a proprietor by purchasing water and water rights from willing sellers and then reselling the water and water rights to willing buyers at a cost sufficient to cover the waterbanking expenses.

4. As a proprietor by acquiring jurisdiction over blocks of water and then releasing and selling the water under predetermined arrangements or at current market value.

It can be seen that the water supply market as established by a water bank can have a number of different characteristics. The market can be as formal as the New York Stock Exchange or as informal as a garage sale. It can be a "free" market where prices reflect variances in supply and demand, or it can be "controlled" where the cost of water is based on a specific pricing formula or predetermined arrangement. The water bank can be limited to acting as a facilitator or "broker" between buyer and seller, or it can be allowed to purchase and sell water as a proprietor. The bank can be statewide, or limited to a specific basin or region. The transfer of water and water rights can be restricted to agricultural uses only or the market may be expanded so that a buyer can use the water for a different purpose than that used by the seller.

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## THE WATER SUPPLY MARKET

The primary factor which allows a water bank to function in an "ideal" water supply market is the profit motive. For example, during a water shortage the water bank might pay a higher price for water than the value of certain low, market value crops. Thus, some farmers may be willing to sell to the bank rather than grow crops. On the other hand, during the same water shortage, other farmers might be willing to buy water from the water bank and pay a much higher price in order to sustain their higher market value crops, such as orchards and vineyards. In the one instance, the value of water during a given water shortage year was greater than the return for certain crops; and in the other instance the value of the orchards and vineyards was greater than the price of water at that particular time. In any case, the price mechanism would presumably act to allocate water to its highest and best use.

In water short years, it could be expected that the market would be far more active than in moderate or surplus years. Drought conditions would force water prices to relatively high levels. Farmers growing water-intensive crops could decide early in the season (or preseason) if the market outlook justified the purchase of high priced water from the water bank.

Activities-in the water supply market would be voluntary and optional. This voluntary aspect would allow participation by those who wished to do so; nonparticipation would have no effect on the nonparticipant except that which would otherwise occur from not selling or purchasing water through the bank.

In an "ideal" water supply market, water could enter the water bank by other means in addition to that from farmers choosing to sell water rather than grow crops. For example, conservation practices, on-farm management efficiencies, changes in purpose of use of water right, additional reservoir storage capabilities, changing uses and demands for water, and other means, should theoretically result in water supplies entering a water bank that can operate to its full potential and induce a maximum level of water transfers in a water supply market.

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## A "TYPICAL" WATER BANK

For demonstration purposes and as a model for evaluation, we can consider that a typical, "full service" water bank might have the following elements:

1. The bank is established by state legislation.

2. The bank is designated to operate only in the Yakima Basin for purposes of the YRBWEP study.

3. The bank is organized under an authorized agency (Department of Ecology, another existing agency, or a newly created entity).

4. All transactions by the public with the water bank are voluntary.

5. One of the primary purposes of the bank is to provide information for buyers and sellers of water rights or blocks of water.

6. The bank is authorized to purchase, or otherwise obtain water or water rights to be credited to the water supply bank.

7. The bank is authorized to sell or otherwise distribute water and water rights that have been credited to the water supply bank.

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# CURRENT FRAMEWORK FOR WATER TRANSFERS

The State of Washington administers and manages its water resources under the beneficial use doctrine of western water law. According to Chapter 90.03 RCW, 1917 Water Code:

> "Subject to existing rights all waters within the state belong to the public, and any right thereto, or to the use thereof, shall be hereafter acquired only by appropriation for a beneficial use as in the manner provided and not otherwise; and as between appropriations, the first in time shall be the first in right."

To possess a water right is not the same thing as possessing the water described in that right. Possession of a water right only bestows the right to use a specified amount of water if the user can apply it to the beneficial use for which it has been appropriated. If the amount appropriated or a portion of it can no longer be used beneficially on the land described in the water right, that amount reverts to state ownership. However, the state's ownership is not ownership in the normal sense of the word, but rather a holding of title in trust for all citizens of the state.

Within the general framework described above, the Washington State Water Code provides for some cases of water transfers. Chapter 90.03.380 RCW stipulates that:

> "The right to the use of water which has been applied to a beneficial use in the state shall be and remain appurtenant to the land or place upon which the same is used: Provided however, that said right may be transferred to another or to others and become appurtenant to any other land or place of use without loss of priority of right theretofore established if such change can be made without detriment or injury to existing rights. The point of diversion of water for beneficial use or the purpose of use may be changed, if such change can be made without detriment to existing rights."

Chapter 90.03.390 RCW also provides specifically for temporary or seasonal changes in point of diversion or place of use. Changes made under sections 380 and 390 must be made with the approval and under the supervision of the Washington State Department of Ecology, the agency that administers state water law.

Therefore, it is clear that the potential for some kind of water supply market, albeit an informal one, already exists where Washington State water law allows temporary or seasonal changes in point of diversion and place of use, and permanent changes in point of diversion, place of use, and purpose of use. The only requirements specifically placed on these activities are: 1) that approval be granted by the Department of Ecology, 2) that the changes or transfers occur without detriment to existing rights, and 3) the original right shall not be enlarged.

Under current practices in the Yakima Basin water transfers and changes are common. Generally, these occur as temporary or seasonal transfers within the boundaries of a given irrigation district. Many of the seasonal transfers are "informal" and "internal" and not recorded with the Department of Ecology.

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## ECONOMIC CONSIDERATIONS

Value of water at its present place of use: The value of water at the location where the potential seller is using it in the Yakima Basin varies greatly with time and location. Basic to this value is, of course, the cost of water to the present user (potential seller). Besides the regular farm capital and operating costs per unit of water used, these basic costs may include (if applicable) the level of assessment which the irrigation districts levy on water users to cover: 1) capital improvements and operational expenses embodied in the irrigation facilities of the district, and 2) the amount paid to the U.S. Bureau of Reclamation for delivery of "storage contract water."

Generally, the value to the potential seller of water not only depends on how much he pays annually for its use, but also how much profit he can make to provide the incentive to sell the water in the first place. In order to induce him to sell, the potential seller of water would have to receive more money (or other value) for his water than he would have received otherwise by keeping the water and using it as he presently does.

The value of water is greatly affected by the shortage of water during a given irrigation season. For example, during a season of water surplus the marketable value of water may be depressed. However, during a drought, the value of water would tend to rise to whatever level those farmers would pay who were facing a shortage of water and who were receiving higher returns from their higher value crops than those who were potential sellers of water.

This "true" market value of water as described above is only theoretical and may be significantly affected and perhaps obscured in a future water supply market, especially in the Yakima Basin. In the basin, water storage and delivery systems are somewhat subsidized by public funds, and the government supplies water at "artificial" and "fixed" prices. Thus, these fixed costs for water do not reflect the true marginal value of water and there is not a direct relationship between the amount of water used and the price paid. In the future, matters could get even more complicated for a "supply and demand" type of water market if the government were to construct and operate additional storage reservoirs and provide water to users at prices lower than those in a "free" water supply market. This kind of situation could obviate the need for waterbanking if carried to the extreme.

Water from additional storage to be constructed in the basin could be marketed within the frameworks of a waterbanking program. The marketing need not be confined to irrigation use and the price of water established in today's economy should exceed the rate currently charged present water users.

Cost of Water in a Water Supply Market: The total cost of water to those buying from a water bank will be more than the cost of acquiring the water at its current place of use. Additional costs may include: 1) cost to relocate or convey water to a new place of use; 2) cost of possible treatment to bring quality to desired level; 3) cost of possible compensation/mitigation to damaged third parties; 4) possible storage costs if timing of delivery is to be changed; 5) expenses of the waterbanking service; and 6) sufficient return to the individual or entity holding a right to the water to encourage the potential transfer.

Cost of Waterbanking Services: The cost of establishing and operating the waterbanking service will depend primarily on the extent of the services provided by the bank. A bank offering only a "listing" and "bid" service would have considerably lower overhead than one offering full buying and selling services including a professional investigative staff. Another factor affecting the cost of waterbanking is the level of activity; whether local or statewide; whether active only during water shortages or at all times, etc.

Financing the Water Bank: There are three options open for financing the banking service:

1. Self supporting. The users would pay the cost of the banks operation.
2. Public funding. Costs are paid through legislative budgets.
3. Combination of 1 and 2 above.

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# INSTITUTIONAL CONSTRAINTS

## STATE CONSTRAINTS

As we have shown in the section under "Current Framework for Water Transfers," the Washington State Water Code of 1917 allows both temporary and permanent transfers of water held under valid state water rights. However, there are a number of institutional constraints inherent in state water law which tend to hinder activities in a water supply market.

Use of Conserved Water: One of these constraints is the application of the "beneficial use doctrine." The amount of a water right is the quantity necessary for the beneficial use for which it was intended. Thus, the purpose of the beneficial use doctrine is to encourage efficient use and discourage waste. However, when considering the incentive to participate in a waterbanking program, the contrary result may occur.

For example, it could be expected that a substantial amount of water transferred to a water bank would be in the form of "saved" or "excess" water that farmers conserved in one way or another. However, when applying the "beneficial use doctrine," this is not the case and we find that water savings are no longer attached to the pertinent water right, but automatically revert to the state regardless of the existence of a water supply bank. In other words, the farmer cannot (under present law) benefit directly from any water savings resulting from a rehabilitation of his irrigation system (or by water savings from any other means or measure) by selling the conserved water to the water bank or another user. As soon as the water is saved or conserved, it can no longer be applied to beneficial use under conditions of the water right, and the saved water must be reappropriated with a new priority date. Thus, farmers cannot capture the benefits they create by water conservation, and they would tend to use the maximum amount of water under their water right (whether they need it or not) rather than lose it.

This is not to say, however, that water reverting back to the state due to agricultural conservation efforts could not be used by the state in a waterbanking operation. Any waterbanking legislation that would be passed by the state legislature could contain provisions allowing the water bank to obtain certain unappropriated waters (i.e. conserved water that has reverted back to the state) and then using this unappropriated water in waterbanking operations. It is not known, however, if legislation could be passed that would go so far as to circumvent the "beneficial use doctrine" enough to allow farmers to benefit directly from their conservation efforts by allowing them to sell their excess water to a water bank or other users.

Fear of Loss Through Relinquishment or Abandonment: Another way that the "beneficial use doctrine," as it has been applied, might hinder activities in a waterbanking program, is through concern over the possible loss of a water right. Chapter 90.14.160 RCW stipulates that a water right holder ". . . who voluntarily fails, without sufficient cause, to beneficially use all or any part of said right to divert or withdraw for any period of five successive years after the effective date of this act, shall relinquish such right or portion thereof, and said right or portion thereof shall revert to the state. . . ." Chapter

90.14.180 RCW also requires relinquishment of a water right for a holder who "abandons" the right. Both the "nonuse" and "abandonment" provisions are significant constraints at least in the minds of any water right holders contemplating activities in a prospective water supply bank. This concern and fear of losing water rights through participating in waterbanking activities (or even by transferring water directly to other users) can be alleviated (at least in a legal sense) by passing legislation that defines waterbanking activities as "beneficial use" and therefore not affected by 90.14.160 RCW and 90.14.180 RCW, provided that the conditions in these statutes are otherwise adhered to. Whether such legislation would reduce or eliminate long held beliefs and fears, under the "use it or lose it" concept, are doubtful or at least unknown at this time.

3rd Party Effects: The implications of 3rd party effects due to waterbanking activities are complicated, significant, and confusing. The major 3rd party effect due to a transfer of water would be the impact to downstream water right holders by reduction of return flows - water which downstream users depend on for irrigation. Other 3rd party effects that may be significant are the impacts on ground water recharge, wildlife, recreation, aesthetics, and instream flows.

Typically, the transfer of water to a new place or purpose of use will entail a different complex of physical facilities to manage the new water arrangement. Since waters of any given hydrologic system are interrelated and interdependent on the workings of each part of the system, a modification or change at one point is likely to induce a change in the quantity, quality, or regimen of flow available to downstream locations. Thus, any change in use may cause either trivial or major effects on other water users, depending on the amount and location of change. Determining the effects and impacts to be caused by large and significant water transfers upon the parts of a hydrologic system would be very difficult, if not impossible.

Washington State water laws are very clear in their protection of existing water rights. As discussed previously, Chapter 90.03.380 RCW allows water transfers under certain conditions, but only ". . . if such change can be made without detriment or injury to existing rights." Thus, it appears clear that any transfers of water or water rights under a waterbanking program would require the full process and procedures already provided by state law when changes or transfers are made. These procedures include application for change; investigations of water right validity and 3rd party effects; publication of notice; and issuance of approval by the Department of Ecology. These procedures in themselves would be an appreciable constraint to "large-scale" participation in waterbanking activities because of the time element, complexities, and intimidation of the process. An added implication of the 3rd party effect of water transfers is the possibility (always present) that a party, not participating in the water transfer, will protest (either through the water management application procedure or in court afterwards) on the grounds that they are (or will be) adversely affected by the water transfer. Such a protest or litigation could involve high costs and lengthy procedures.

Establishment of a water supply bank through state legislation would have to include provisions dealing with the 3rd party effects of water transfers; and the legislation would have to provide that unavoidable 3rd party losses were compensated fairly and with due process. Mitigation and compensation for 3rd party effects would add undetermined costs to the waterbanking operations.

It should be noted here that the extent of 3rd party effects due to waterbanking operations would, in large part, depend on the type of waterbanking system established by state legislation. As an example of minimum effects, when transfers are made within an irrigation district (and with district approval and cooperation) as they are at present, 3rd party effects have not been a factor because the district can easily control water supply distribution to buyer, seller, and 3rd party.

Also, in considering 3rd party effects, it seems logical to assume that the concern and attitude toward impairment of existing rights are not as serious when a temporary (seasonal) change is being proposed as compared to a permanent transfer. Therefore, whether the water bank is buying and selling water rights (in contrast to buying and selling the seasonal use to a water right) will make a significant difference in the implications of waterbanking to existing rights.

## LOCAL CONSTRAINTS

As we have discussed, seasonal and temporary water transfers are common within the boundaries of individual irrigation districts in the Yakima Basin. In these cases, the state water management agency, the Department of Ecology, generally allows the district itself to make and to manage the allocations and transfers of water use between the district's constituents. Also, within some of the irrigation districts are Local Improvement Districts (LID) which contract individually with the irrigation districts for delivery of a specified water supply to serve their own use, whether suburban, municipal, or irrigation.

As we have seen, there appears to be very few constraints to informal water transfers within the boundaries of a given irrigation district, unless the district would have its own restrictions against internal transfers of water. However, it is when we contemplate water transfers from individual farmers within a district (or even from the district itself) to an entity outside that district that we encounter severe problems and constraints.

Irrigation districts are created and regulated by state statutes (specifically Titles 87 and 89, Irrigation Laws of Washington State). In accordance with these state laws, the districts hold all property and rights "in trust" for their constituents. All districts have statutory restrictions limiting the geographic areas they can serve and also limiting (to some extent) their freedom to transfer, exchange, or otherwise manage their property including water rights. The districts also have a variety of contractual commitments and indebtedness (between their constituents and the district; and between the district and outside entities) which may become a lien upon water and water rights, . . . and thus restrict auy transfer to locations outside the district in a "free" water supply market.

For example, an irrigation district having long-term obligatory contracts of repayment with an outside entity could only participate in a water-banking program to the extent that transactions could be made compatible with contractual obligations. Ancillary to contractual arrangements are the loan or bond repayment arrangements which likewise must be considered as limiting the water market potential in certain cases.

In any case, the legal implications and restrictions to the transfer of water from inside an irrigation district to an outside entity constitute a constraint of the first magnitude. In other words, intradistrict transfers of water are permitted and commonly occur at the present time, but all other transfers appear to encounter legal and institutional obstacles that may prove to be insurmountable in many cases, especially if the governing board of the irrigation district objects to the water transfer.

## FEDERAL CONSTRAINTS

Perhaps the most important federal institutional constraint to a water-banking program in the Yakima Basin is the Reclamation Act of 1902, its subsequent revisions, and the numerous activities and facilities that exist and operate under its auspices.

160-Acre Limitation: The Reclamation Act and its revisions provide the basis for present day administration that limits water from a federal project to only 160 acres of land in a single ownership. Strict interpretation of the 160-acre limitation may restrict the number of participants in a water supply market, primarily buyers, where the water transferred to the water bank or individual water users is provided by U.S. Bureau of Reclamation (USBR) facilities and under USBR water supply contracts. The Reclamation Reform Act, passed by Congress in 1982, may result in an easing and modifying of the 160-acre limitation provision as historically practiced. The effect of the limitation provision on water-banking would depend on how the provision is applied to buyers of water under USBR contracts.

### Natural Flow Rights:

Approximately 620,000± acre-feet of water is distributed annually by the USBR to various irrigation entities under what are termed "natural flow rights." These rights were perfected prior to the 1905-6 "limiting agreements," and prior to the 1905 "withdrawal of all unappropriated water" in the Yakima Basin by the Federal Reclamation Service, and approved by the state. The "natural flow rights" are appurtenant to the lands that, prior to 1905, were served by water diverted through ditches from the Yakima River by gravity flow.

Most federal constraints do not appear to be a serious factor for water or water rights, classed under "natural flow rights," that would be transferred to a water bank or directly to other water users in a water supply market. It should be noted, however, that the other constraints (state and local) discussed previously may affect "natural flow rights" if they were otherwise applicable. Also, "Yakima Indian constraints" as discussed later, may have a potential constraint on transfer of "natural flow" rights.

Storage Contract Water:

In the Yakima Basin, six major irrigation districts and 18 smaller units have contracts with the USBR for delivery of about 1,800,000 acre-feet of irrigation water annually providing the water is available. The water is released during the irrigation season from six reservoirs owned and operated by the USBR. The USBR's right to control this "storage water" stems from the 1905 act of the state Legislature granting to the U.S. the right to withdraw all unappropriated waters of the Yakima River and tributaries for the purpose of developing reclamation works with adequate water supplies in the watershed.

In subsequent years after 1905 the USBR constructed the various parts of the Yakima Reclamation Project: the existing six reservoirs, irrigation conveyance systems, diversion dams, and other project facilities. Construction and O&M costs for the Yakima project are being financed by the project users through "repayment contracts" and "storage water contracts." Thus, the water released by the USBR from its storage reservoirs, as annual deliveries to water users under various contracts, represents the water originally withdrawn pursuant to state law in 1905 (excluding water released for "natural flow rights").

As we have seen, the federal government has contracts for water deliveries and longterm obligatory contracts for repayment of facilities constructed. These contracts are with irrigation districts, canal and ditch companies, municipalities, associations, and individuals. These obligations would appear to have somewhat of a lien upon the water rights and could conceivably restrict their movement in a water market. At this time it is all too unclear to what degree these federal constraints would amount to. A lot would depend on the reaction of the USBR to attempts of transferring water and/or water rights to areas outside of irrigation district boundaries. At the very least, approval of certain water transfers would have to be obtained not only from the irrigation districts, but also from the USBR.

The situation is somewhat analogous to the real estate market in that the mortgage obligations and conditions directly affect the marketability of a parcel of land. However, the water market is even more complicated because the obligations in the water resources are usually group obligations encumbering many different water rights and holders.

The Yakima Indian Constraint: A situation that is likely to occur in waterbanking/water supply market activities in the Yakima Basin is where a farmer has water or a water right that he would like to sell. However, if his diversion point lies downstream from the Yakima Indian Reservation and the buyers point of diversion lies upstream from the reservation, a question of federal/Indian water rights presents itself. The problem of uncertainty results from the Reservation Doctrine, also called the "Winters Doctrine." In 1908, the U.S. Supreme Court (in Winters vs. U.S.) ruled that Congress, in creating an Indian reservation, must have intended to reserve water for use on the reservation, and it granted the government an appropriation priority dating from the creation of the Indian reservation.

The main reason why the "Winters Doctrine" is a source of uncertainty in relation to waterbanking is that sellers and buyers in a water supply market may not be sure of their legal grounds in temporarily transferring all or part of their water right that appropriates water flowing adjacent to the Yakima Indian Reservation, and that might be part of the "federal reserved right." Further complicating the problem is the fact that these federal/Indian water rights are unrecorded and unquantified. These unrecorded rights, and the uncertain implications of adversely affecting them, pose a potential constraint of unknown magnitude to a waterbanking operation.

"1945 Consent Decree": In 1945, the U.S. District Court filed a judgment commonly called the "1945 Consent Decree." This decree laid out the obligations of the United States to deliver natural flow waters, storage waters, and waters from other sources (return flows) to specified irrigation districts and users in the Yakima Basin. The court ordered the U.S. (Bureau of Reclamation) to deliver given quantities of water into specified diversion canals from the Yakima River. For the most part, the quantities ordered to be delivered were broken down into a monthly schedule. In addition, the quantities include estimated losses from point of diversion to point of delivery.

The 1945 Consent Decree would not appear to present a problem where water transfers are conducted informally within the boundaries of an individual irrigation district, . . . after the quantity of water ordered by decree has been diverted. However, a potential problem arises when a quantity of water, to be delivered under order of the Consent Decree, is sold or otherwise transferred to another part of the basin by a water user and, hence, must be delivered to a location that is different from that ordered in the decree. To what extent the 1945 Consent Decree would impede a water transfer under such a situation is not clear at this time. Much would depend on the interpretation and application of the Washington State Water Code (Chapters 90.03.380 RCW and 90.03.390 RCW) to activites involving transfer of water that falls under jurisdiction of the Consent Decree.

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# EXPERIENCES OF OTHER STATES

For those states under western water law, Idaho is the only state that has actually implemented a full-scale, statewide waterbanking program. California has provided legislation that opens up the opportunity for a limited, informal water supply market. Utah studied the potential for waterbanking, but has not moved ahead on any type of program. Colorado water statutes merely provide for informal "loaning" of water.

## COLORADO

The state, in its water code, provides for the "loaning" or "exchanging" of water between users on the "same stream" provided that both parties have a valid water right. Water transfers are "limited" and done mainly within irrigation districts.

## UTAH

In 1980, the state considered a waterbanking program as part of its "State Water Plan." Even though there was much enthusiasm and hope for the waterbanking proposal, interest in the agricultural community was nil. Without support and interest from the water users, nothing has been accomplished.

Utah state water laws already provide for some transfers of water. Water "exchanges" are being conducted presently in "informal transactions" similar to those already being done within irrigation districts in Washington State. Nothing beyond this is presently being planned in Utah.

## CALIFORNIA

The California Water Resources Board has conducted some "in-house," informal studies of waterbanking (none of which are available for review), but the decision has been made not to go into a "full-scale" program by way of setting up an organization to run a statewide water bank. Officials of the Control Board feel that waterbanking is "too complicated" and in actual practice, only "limited to specific areas and conditions."

In 1980 and 1981, legislation was passed liberalizing the water code, opening up the potential for an informal water supply market, and allowing for more water transfer opportunities. The new legislation contained provisions that 1) voided the "forfeiture clause" in the water code where the reduction in the use of water is due to water conservation efforts, 2) declared that a transfer of water or water rights does not constitute "nonuse or an unreasonable use of water," 3) authorized "trial transfers" where the actual impact on 3rd parties is difficult to determine in advance, and 4) specifically authorized "long-term transfers" requiring a change in place of use, point of diversion, or purpose of use, unless the transfer would result in detriment to existing rights. Thus, even while not establishing a water bank as such, the new legislation did eliminate some impediments to water transfers between individual water users.

Within the last few years, the California Department of Water Resources (DWR) has been studying a plan called the "Agricultural Water Purchase Plan" (AWPP). The AWPP is interesting to note because the constraints, attitudes, and position of water users in California may reflect those prevalent in the Yakima Basin. Under the AWPP scheme, DWR would increase water supplies in the Sacramento Delta area during a drought by purchasing water upstream from the Delta from farmers and water districts (mostly rice growers) who are willing to forego available water supplies for financial incentives that would compensate them for losses incurred from use of less water in dry years. The proposed plan assumed that DWR would be able to negotiate long-term agreements with farmers or districts, under which DWR would secure the option to purchase water if needed to meet contractual delivery commitments (under the state water project) during a drought. The plan also considered water purchases through short-term (most probably seasonal) agreements.

The Agricultural Water Purchase Plan can be considered as a specialized, limited water bank, but one that does not open up a water supply market. It restricts the water transfers, buyers and sellers, and location.

So far the AWPP proposal has not been approved or implemented due to 1) resistance and objections of the farmers in the rice growing area where water would be transferred from; 2) environmental factors including potential damage to fish and bird habitat; 3) federal (USBR) constraints on transfer of "contract" water; 4) social impacts on local, agricultural related businesses, and 5) potential impacts on 3rd parties, mostly from reduced return flows. DWR has dropped this plan for the "time being."

## IDAHO

A full-scale water bank was authorized by the Idaho State Legislature in 1979. Rules and regulations were adopted in 1980 by the Idaho Water Resources Board. The Water Resources Board operates the water supply bank. The Department of Water Resources, as the administrative agency responsible to the Board, assists the Board in operating the bank.

The Idaho water bank has the following pertinent elements:

1. The state can purchase and sell "natural flow" water and "stored" water.

2. The water bank operations are statewide.

3. An organization within the Water Resources Board was established to act as the "bank," and to administer and manage the program.

4. The state can buy (or otherwise obtain) and sell water on both a temporary and a permanent basis.

5. The state can buy (or otherwise obtain) and sell blocks of water held under valid water rights.

6. The state can buy (or otherwise obtain) and sell the rights to water (i.e. transfer the actual water rights).

7. The state has the option of accepting the transfer of water into the bank on a "contingency" basis with payment to be made to the seller only if the water is subsequently sold.

8. The water bank retains 10 percent of all funds from the sale of water to cover the cost of the waterbanking service. These funds are used for acquiring other water for the bank and for financing water resources development in the state.

9. Local entities can be appointed by the state to serve as a committee to facilitate and manage water transfer and transactions within a specified area.

10. Activities in the water bank and water supply market are voluntary.

11. The sale price for water is determined by the state.

12. Water or water rights transferred to the bank are immune from relinquishment or forfeiture for "nonuse."

It can be seen from the elements listed above that the Idaho water bank is very "complete,". . . it not only acts in the role of a facilitator in expediting and managing water transfers, but the state is also a proprietor, entrepreneur, and participant in the water market itself: the state can buy and sell the use of water and water rights.

Potential participants in the Idaho water bank must file applications with the Department of Water Resources. The party applying to sell water to the bank must verify ownership of the water right, present evidence of the availability of water, and provide written consent (to the sale) from the company or irrigation district (if applicable) that delivers the water. The Resources Board approves the application upon satisfaction of several requirements: 1) verification of right, 2) consents, 3) the "reasonable value" of water for a water right, 4) that the acquisition will have present and future beneficial effect not contrary to the State Water Plan, 5) that the application is in the "local public interest," 6) that there are sufficient funds on hand to acquire the water or water right or, if not, that all parties are agreeable that the water can be acquired on a "contingency" basis. The Department of Water Resources evaluates each application in terms of 1) whether there will be detriment to existing rights, 2) whether the application would constitute an enlargement of the water right to the buyer, 3) whether beneficial use will be made of the water right, and 4) whether the transfer is in the local public interest.

Since the Idaho water bank was inaugurated in 1980, there has been no activity. Presently, there is only one "account" held by the bank that is available for transfer . . . and state officials admit that this one account was transferred "temporarily" to the bank for the express purpose of avoiding having the rights relinquished for nonuse. As discussed earlier, rights that are transferred to the bank, whether "held" by the bank or sold temporarily, are immune from relinquishment for nonuse. Hence, although a complete and "full-service" waterbanking operation is available in Idaho . . . it is not being used.

The only water supply market presently active in Idaho is one that has been operating since 1919 in Water District 01. Here in District 01, a Storage Pool Committee was appointed in 1919 to assist and advise the state watermaster on the renting of surplus water stored in USBR reservoirs. The watermaster, acting under approval of the committee, makes water rentals and collects and disburses the rental fees. Prices for water rentals are fixed by the USBR; hence, there is no supply and demand type of water market. Water stored in the USBR reservoirs is normally held for supplemental irrigation use in drought years, and all of the water is reserved under contract to the irrigation districts and other users. However, in between droughts the water can be "rented" under the water transfer program by various users provided that they agree that their supply may be discontinued during periods of drought.

The reasons that the statewide waterbanking program in Idaho (outside of Water District 01) has been something less than a success are not exactly clear. A combination of the following factors apparently contribute to the lack of activity in the Idaho water bank:

1. The state's role as a proprietor and entrepreneur seems to be "controversial" and vulnerable to criticism or suspicion of alleged manipulation of water markets to suit its own ends.

2. The 10 percent fee charged by the bank for its services may be excessive.

3. Federal, local, and some state constraints to waterbanking have not been satisfactorily eliminated or reduced.

4. One of the major roles of the water bank is being a facilitator and providing a centralized source of information about water availability, and it turns out that this service may not be needed or even wanted by the water users.

5. The attitude of water users and water organizations toward state managed waterbanking has not been changed and remains an obstacle to an active water supply market.

6. A new constraint of not offending the "local public interest" has been created by the waterbanking legislation and this has led to some concern, confusion, and vagueness.

7. The transaction requirements, application process, and administrative procedures for buying and selling water through the water bank may be too cumbersome, lengthy, and forboding.

8. There has not been a "real" water shortage in Idaho since the water bank was established, and when a drought does occur, the waterbanking operation may become somewhat more active than at present.

## EVALUATION OF OPTIONS

Following is a discussion of various options open for selecting a type of water bank and water supply market. Along with each option is an assessment of its potential workability.

OPTION #1

Establish a complete "full service" waterbanking system similar to Idaho (either statewide as in Idaho or limited to the Yakima Basin).

Elements

A. Set up an organization within a state agency, such as the Department of Ecology. If the waterbanking operation is to be limited to the Yakima Basin, Ecology could still be the operator, or another existing entity could be utilized, or a new entity could be established within the basin to operate the bank.

B. All transactions with the water bank are voluntary.

C. The bank can buy or otherwise obtain water and water rights to natural flow water and storage water.

D. The bank can purchase water held under a valid water right on a temporary basis, or the water right itself can be purchased on a permanent basis.

E. Water obtained by the bank would not be subject to relinquishment for nonuse.

F. The bank can sell water and water rights to all parties who qualify under established requirements.

G. The water banks can purchase (or otherwise obtain) water from a variety of sources such as new storage, irrigation, municipal, industrial and hydropower, and then sell (or otherwise assign) the water to a variety of uses such as irrigation, hydropower generation, municipal, industrial, recreation, and instream flows for fisheries.

H. A specified percentage of each water sale would be retained by the bank to cover the cost of services.

Assessment

To implement Option #1, enabling legislation would have to be passed to authorize elements A through F listed above.

On the surface, the Option #1 type of water bank would appear to possess "all the tools" necessary to handle almost any type of water transaction and, thus, accomplish the best results. However, there does not appear to be sufficient reason to believe that this "full-scale" type of waterbanking operation would work any better or create more "water market" activity in Washington State than it has done in Idaho, where it does not appear to be active (except perhaps during some future drought).

Nor does the "Idaho type" of water bank appear to have any more potential in Washington State than it did in Colorado, Utah, and California, where these states contemplated waterbanking and then avoided going into a "full-scale" waterbanking operation . . . but instead either they attempted to open up a "limited" type of water supply market, or they "continue to study the situation," or they decided to do nothing further.

In order for an "Option #1 type" of waterbanking operation to have a fair chance for success in Washington State and to be able to accomplish results and induce reasonable activity in a water supply market, certain significant actions would have to be taken and some existing conditions need to be changed beyond those basic elements for a water bank listed in A through H above.

High on the list for attention would be the state, local, and federal constraints discussed previously. These constraints would have to be eliminated or reduced enough to induce market activity. However, it is problematical at this time whether the political/social/institutional climate is conducive to allow for some of these constraints to be dealt with effectively.

Nevertheless, some constraints that would have to be be tackled in order to improve the chances for success of a water bank (represented by Option #1) are:

1. Part of any enabling legislation to establish a water bank would have to include a provision to change the present application of the "beneficial use doctrine." This change would have to be sufficient to assure water users that the water they save by conservation efforts will remain part of their water right, and that this "conserved" water is theirs to sell to the water bank (see page 12 for a discussion of the "beneficial use doctrine").

   It can be expected that a substantial amount of water in the Yakima Basin, that could be considered potentially available to the water bank, will be in the form of "saved" or "excess" water that farmers could conserve in one way or the other. Unless this substantial amount of "conserved water" can be sold to the water bank, chances are that it will not be conserved in the first place and, thus, it may never show up in the water supply market.

2. Legislation for waterbanking would need to include a provision classifying waterbanking activities as a "beneficial use" and, therefore any water transferred to the water bank would not be affected by the "relinquishment" and "abandonment" features of 90.14.160 RCW and 90.14.180 RCW (see discussion of these issues on page 12).

3. It would appear that the uncertainty and possible legal implications of 3rd party effects might keep a sizeable amount of water out of the water supply market unless the problem is addressed (see discussion on page 13). Possible solutions to the problems are:

a. Organize a highly trained and specialized unit within the water bank organization that could adequately investigate and evaluate possible 3rd party effects due to reduced return flows and other factors.

b. Provide compensation for 3rd parties expected to be damaged (or damaged after the fact) by water transfers. Compensation costs would be added to the price of water charged by the water bank.

c. Authorize a "trial" transfer of water or water rights where the effect on 3rd parties is unknown or may be potential but not determined by investigation. If damage to the 3rd party does occur, the transfer of water could be discontinued or mitigation measures would be required.

4. It is very doubtful if adequate inducement and effective changes can be made that would allow water and water rights to be "freely" transferred from inside irrigation districts to outside entities. Apparently this constraint will be a formidable obstacle to any water supply market established in the Yakima Basin (see discussion, page 14). This constraint is made up of long-held attitudes, legal and contractual restrictions, and institutional barriers. If a water bank is established, it will probably be a matter of time, patience, and effort to make available to a regional water market the large amount of water held by and within irrigation districts and other entities in the Yakima Basin. And, without this large block of water being available to a basin-wide water supply market, the success of a water bank is in question.

5. Federal constraints to the type of water bank represented by Option #1 are an unknown factor in so far as they would actually prohibit a certain degree of market activity in a waterbanking operation (see discussion, page 15). Some of the constraints may be overcome in the Yakima Basin if the U.S. Bureau of Reclamation were to play an active role in the waterbanking program. As discussed previously, the USBR may have to approve certain water transfers if the water involved was held under USBR storage and delivery contracts, and delivered under order of the 1945 Consent Decree.

OPTION #2

Establish a water brokerage service
(either statewide or limited to the Yakima Basin)

Water brokering would not be the same as waterbanking. In waterbanking under Option #1, the state (or other established entity) would have a "proprietorship" interest over its water "assets." In other words, the state would buy and sell water and water rights. Water brokering, on the other hand, denotes a negotiated transfer of water or water rights. The primary activity of a water brokerage service would be in providing information and means needed by buyers and sellers of water so that transfers could be expedited. So, similar to the function of a real estate broker, the water brokerage operation would serve as an arranger in water transfers between negotiating parties, and not as a participant in the market itself.

Elements

A. Set up an organization within a state agency such as the Department of Ecology. If the water brokerage operation is to be limited to the Yakima Basin, Ecology could still be the operator or another existing entity could be utilized, or a new entity could be established.

B. All transactions with the water bank are voluntary.

C. A specified percentage of each water transaction would be retained by the brokerage operation to cover cost of expense (this may not be needed if the state decided to absorb the brokering costs).

Assessment

To implement Option #2, enabling legislation would be needed to charter and authorize establishment of the brokerage service. It would be necessary also for the legislation to liberalize existing water statutes to the extent that water and water rights could be transferred freely within the water supply market.

Most of the drawbacks and problems discussed under Option #1 would apply to Option #2. Also the state, local, and federal constraints that would tend to hinder water market activity would do so whether or not the state was a proprietor (as in a water bank) or just a facilitator/broker (as in a water brokerage service).

An advantage of a brokering operation over a water bank operated by the state is that there would be less vulnerability to criticism about the state regulating or manipulating water markets to suit its own ends.

There is no reason to believe that water brokering under Option #2 would be any more successful in creating and expediting water transfers than waterbanking would be under Option #1. Any success under the brokerage concept would depend on the advantage that buyers and sellers would gain by using the brokerage service rather than "going-it-alone." The Yakima Basin is a relatively isolated and stable agricultural area where water users have a close acquaintanceship with one another and where a large portion of water transfers would occur between water users within an individual irrigation district. Thus, unless advantages were "built-in" by the enabling legislation, it is doubtful that there would be adequate activity in a water brokerage operation.

OPTION #3

Establish a limited type of waterbanking operation

In this type of system, the banking service would operate within those limits where the enabling legislation restricted the bank's purchase and sale of water and water rights.

Elements

A. Set up an organization (state or other entity) that would operate the bank.

B. The supply and demand type of market and "free access" of Options 1 and 2 are no longer in effect.

C. The banks authority and capability to buy or otherwise acquire water is limited to specific classes and blocks of water and water rights. Sale of water may also be limited to specific buyers or recipients.

Assessment

In this system the water supply market is no longer relatively "free and open" as in Options #1 and 2. Limitation and restriction of the market would depend on the legislative mandate.

Following are some examples of ways that water and water rights may be transferred under the limited framework of Option #3:

1. The bank could acquire a block of water made available for "bank use" from new storage reservoirs constructed under auspices of the Yakima River Basin Water Enhancement Project.

2. The bank could acquire water rights that were "relinquished" under RCW 90.14.160 or "abandoned" under RCW 90.14.180.

3. The bank could acquire (by purchase or otherwise) water "conserved" through various improvements and rehabilitation of irrigation systems or through better on-farm management practices.

4. The bank could acquire water found by means of the ongoing court adjudication proceedings (or by another means), to be in "excess" of the amount needed for the purpose of use that the right was perfected.

5. The bank could acquire water through arrangement between interests such as fisheries and irrigation. For example, fisheries interests may agree that a portion of a block of "storage water," assigned for instream flow use during normal years, would be reassigned to supplemental irrigation use during drought years. Thus, when a drought occurred, the bank would obtain the "released" storage water and redistribute (sell?) it to irrigation interests in need of a supplemental supply.

6. The bank could sell or otherwise distribute the water and water rights, obtained through means of items 1-5 above, in any number of ways including sale to the highest bidder, sale by prearranged pricing formula, subsidized distribution, assignment to instream flows for fisheries, etc.

The success of the "limited type" of waterbanking concept would depend to a great extent on the passage of a "strong" legislative package that would open up new and innovative avenues for the redistribution and use of blocks of water where and when needed.

## OPTION #4

### Establish a "combination-type" of limited-waterbanking/brokerage service

The type of water markets operated under Options 2 and 3 above can be modified and combined in various ways. For example, the brokering concept (Option #2) might be applied generally throughout the region, while the banking service would be limited to situations where a proprietorship opportunity existed or where the enabling legislation would restrict the bank's purchase and/or sales/distribution of water (as outlined under Option #3).

### Elements

A. Set up an organization (state or other entity) that would operate the bank/brokerage.

B. Other elements would be various combinations of those listed under Options 2 and 3.

### Assessment

This type of waterbanking/brokerage system would inherit all of the characteristics, advantages, and disadvantages listed separately under Options 2 and 3.

As discussed previously under Option #2, water brokering alone does not appear to have great potential for success. However, if we can assume for the moment that a "successful" package can be put together under a limited waterbanking program (Option #3) . . . then, water brokering might be added on to make a "complete service" out of the operation. For example, we could expect that the brokerage service would not be very active during "normal" water years. But during a drought, a sense of urgency and concern may cause water users to need the assistance of a brokerage operation to provide market information and to facilitate water transfers. This type of "part-time" usage could quite possibly justify the brokerage concept, provided that it be attached to a "successful" waterbanking program such as the limited one that might be established under Option #3.

## OPTION #5

### Improve the existing situation for water transfers

This option would represent an effort to improve existing conditions without establishing any type of water bank/brokage operation or organization. Option #5 would be an attempt to eliminate or ease some of the restrictions and constraints that presently inhibit water transfers.

### Assessment

As discussed previously, the potential for water transfers already exists where state water law allows temporary or seasonal changes in point of diversion and place of use, and permanent changes in point of diversion, place of use, and purpose of use. Improvement of the present situation (without establishing a water bank or formal water supply market) would consist mainly of state legislation that eliminated or reduced state constraints to water transfers and opened up new avenues for water transactions in the existing "informal" market arena. Some potential legislative provisions (also discussed elsewhere in this report) are:

1. Change the present application of the "beneficial use doctrine" by allowing water users to keep the water that they save by conservation efforts and allow them to either use it on additional land or sell it to another user.
2. Void the "relinquishment" and "abandonment" clauses in the water code when they relate to water or water rights that are transferred to another user.
3. Declare specifically that a transfer of water or water right is a "beneficial use" and does not pose a threat to the validity of a water right even if the transfer is made on a "long-term" basis.
4. Authorize a "trial transfer" of water or water rights where the effect on 3rd parties is unknown or potential but not determined by investigation.

OPTION #6

Do nothing

There are those who would say that the Washington State Water Code already provides adequately for the transfer of water and water rights by allowing temporary or seasonal changes in point of diversion and place of uses, and permanent changes in point of diversion, place of use, and purpose of use. Those who take this position would also probably make the following additional points of contention:

1. The so-called "constraints" to waterbanking and a water supply market are not constraints at all but merely "safeguards" to protect the public and existing water right holders from those who would abuse the system and circumvent the intent of the 1917 Water Code.
2. The 1917 Water Code and the "beneficial use doctrine" as it is presently applied has worked very well for all these years . . . drastic changes are not needed.
3. There is no reason to believe that a water bank would do any better in Washington State than it has in Idaho.
4. Authorizing the state to buy and sell water and water rights in a water supply market will lead to excessive power and will allow the state to manipulate the market to its own ends.
5. There is no interest in waterbanking among water users, and without that interest and support, any waterbanking program will fail.

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# CONCLUSIONS

1. State, local, and federal constraints to a water supply market are quite formidable, and they create an obstacle to the successful operation of a formal water bank in the Yakima Basin. At this time, it appears that the aggregate of constraints to basin-wide waterbanking, if not eliminated or reduced, will tend to keep a sizeable amount of water from entering a water supply market established under a formal water bank.

2. Some constraints to waterbanking can be eliminated or reduced, but these remedies may be controversial and may generate opposition particularly against any legislation which would significantly change the highly regarded provisions and longstanding traditions of the 1917 Washington State Water Code.

3. Some constraints to basin-wide waterbanking, particularly those encountered within the jurisdiction of irrigation districts, may remain for some time even after establishment of a water bank. It may be a matter of time, patience, and effort to eliminate or reduce constraints made up of long held attitudes, legal and contractual restrictions, and institutional barriers.

4. The actual need for a water bank in the Yakima Basin has yet to be determined. It is not known to what extent the water users would do business with a water bank if it were to be established. Given the water supply conditions existing in the Yakima Basin, it would be safe to say that activity in any type of water bank or water supply market that was established would be higher during times of water shortage. During those times of shortage, the usefulness and effectiveness of a water bank would depend on its reception and acceptance by water users and on how the bank's procedure, authority, and operations were adapted to the legal, institutional, and water supply framework of the Yakima Basin.

5. The lesson that can be learned from water supply markets studied, implemented, and/or experimented with in other states is that waterbanking cannot be successful without the full support of the local water users; nor can it be effective unless it is tailored to fit the unique conditions of the area where it is to be operated. A general "all purpose" type of waterbanking operation that is simply superimposed on the existing water supply conditions in the Yakima Basin could not be expected to meet with great success.

6. Since there are a number of forms and options that waterbanking and a water supply market could take, it is quite possible that a successful package can be developed for the Yakima Basin. A limited, modified form of waterbanking, containing some of the elements described in Options 3 and 4 in this report, may be attainable. It is conceivable that a modified version of waterbanking could be a key element in the Yakima River Basin Water Enhancement Project now being studied for feasibility. Modified waterbanking, or a similar mechanism, may offer the means for distributing water supplies that would become available not only from the outcome of the Enhancement Project but also through the other ways discussed in this report.

7. The specific role that waterbanking will have in the Yakima River Basin Water Enhancement Project (YRBWEP) is unclear at this stage in the planning process. Waterbanking and a water supply market can be considered further as a means to distribute and redistribute water when the various proposed elements of YRBWEP have been developed, accepted, and are being considered for implementation.

100. Question: What is the current estimate of the cost of completion of fish passage facilities in the Yakima River Basin, Washington?

Answer: As of October 1, 1985, the balance of the $36 million project will be $24.9 million.

Question: What percentage of this amount will go to supervisory and administrative costs?

Answer: Thirteen percent. This reflects an extensive requirement of coordination needed between various Federal agencies.

Question: How do the supervisory and administrative costs of the Bureau of Reclamation compare with those of other entities with construction supervision and administration responsibilities on the project?

Answer: We do not have any knowledge of what other entities are using for supervision and administration. However, to give some frame of reference, we made a survey of the Bureau's 1986 projects. The supervision and administration on Reclamation's construction projects runs a little over ten percent on the average.

101. Question Please describe in detail the status of repayment of loans under the Small Reclamation Project Act (SRPA) of 1956. Have any loan recipients defaulted on their repayment obligations? Do you anticipate any loan recipients having problems meeting their repayment obligations in FY 1985 or FY 1986?

Answer: To date, all loans executed under the Small Reclamation Projects Act of 1956 (Public Law 84-984) are being fully repayed in accordance with their contractual obligations to the United States except for the following two SRPA loans. First, the Redwood Valley County Water District (RVCWD) of Redwood Valley, California is presently $600,000 delinquent for principal and interest payments. The RVCWD has experienced rapid increases in power costs and a slower than expected water delivery rate which has combined to seriously reduce their repayment ability. Second, the South Weber Water Improvement District (SWWID) of South Weber City, Utah is having difficulty in meeting its annual repayment obligation because area growth rates and corresponding water deliveries have not developed as originally anticipated.

102. Question: Recreation user fees - Your budget request suggests passage of legislation to increase recreation user fees at National Parks and other recreation areas. Do you foresee any problems with collection of user fees at places besides major visitor portals at National Parks? Do you propose using the receipts from recreation user fees to maintain and improve visitor facilities?

Answer: The National Park Service currently charges entrance fees at 60 areas and user fees at 79 areas that range in size from small historic sites to major national parks. Entrance stations are the most visible but by no means the only method used to collect fees in these areas. The Service believes that recreation fees should and can be collected cost effectively at many more areas than those that presently charge entrance or user fees with no major difficulties. The problems of initiating a fee program will vary with each park. Each proposed fee must meet the test of economic and administrative feasibility as well as other specific criteria. If provided with the requested authority to implement an equitable program of reasonable fees, the Service will apply the specific criteria required by the Land and Water Conservation Fund Act, as amended, to each situation to determine if a recreation fee is warranted. The Service is also proposing that receipts from recreation fees be deposited in a special Treasury account from which appropriations would be authorized to improve the service and facilities available to park visitors.

103. Question: Inholder acquisitions - The FY 1985 Continuing Appropriations Resolution provided $5 million for acquisition of inholdings in National Parks. Please describe in detail acquisitions made and planned during FY 1985. Please describe in detail the status of inholder acquisitions in the Olympic National Park, Washington.

Answer: The $4.9 million provided in the fiscal 1985 Continuing Appropriations Resolution was not appropriated solely for "inholdings" but was also provided for recently authorized areas, hardships and emergencies.

To date, the funds have been used to purchase the Seaborn tract in the Mineral King addition to Sequoia National Park at a cost of $1,555,600. The funds have also been earmarked for acquisition of the following tracts:

Fredericksburg and Spotsylvania Memorial National Military Park - One emergency acquisition at an estimated cost of $225,000.

Blue Ridge Parkway - Three high priority inholding tracts at a total cost of $262,500.

Grand Teton National Park - One high priority inholding tract at a value of $205,000.

103. (Continued)

Cape Krusenstern National Monument - Three lots in Village of Kotzebue needed for administrative site for recently authorized area, with an estimated value of $1,000,000.

Wrangell-St. Elias National Park and Preserve - One emergency tract on Vaden Island and one hardship tract at May Creek with a total estimated value of $600,000.

Lake Clark National Park - Two emergency acquisitions in Twin Lakes area with an estimated value of $300,000.

Ozark National Scenic Riverways - Two emergency acquisitions with an estimated value of $35,000.

Olympic National Park - Two inholding tracts with an estimated value of $151,000.

Regarding Olympic National Park, the Acquisition Program has two parts. One part consists of the portion of the park authorized prior to July 1, 1959, and deemed an "Inholding" area for which funds to acquire lands are provided from the inholding line item in annual appropriations. Presently, there are 397 tracts with an estimated value of $19,382,000 remaining to be acquired in the inholding area, which includes the two tracts for which funds have been earmarked from fiscal 1985 appropriations as well as one additional tract for which an offer to sell is on hand in the amount of $267,000.

The other part of the Acquisition Program at Olympic pertains to the boundary expansion for the park authorized by the act of October 21, 1976. This part of the program is considered to be a recently authorized area. The area was provided a statutory ceiling for land acquisition of $23,704,000 by the act of October 21, 1976, as amended by the act of March 5, 1980. To date, the sum of $24,740,000 has been appropriated including $1,040,000 appropriated under the over-ceiling authority of Public Law 95-42.

Currently, there remains available about $2,200,000 of the funds appropriated for the recently authorized area of the park. With the remaining funds we plan to acquire 17 tracts containing about 108 acres at an estimated cost of $1,500,000 in the Lake Ozette and Point of Arches areas and to complete land exchanges with the State of Washington at an estimated cost of $500,000. This program is progressing at a satisfactory pace and the funds available are considered adequate at this time to complete the Land Acquisition Program in the recently authorized portion of the park.

104. Question: Fish Hatcheries - The FY 1985 Continuing Appropriations Resolution directed the Fish and Wildlife Service to prepare a report on additional fish rearing plans and include in that report a comparative analysis of the costs of Service production to private or commercial production. In addition, the Conference Report on the Continuing Resolution directed the Fish and Wildlife Service to provide a list of potential new hatchery sites including an evaluation of the Nisqually Tribe hatchery, plans for the future production outputs from the Makah National Fish Hatchery, and an analysis of the effect of the Boldt case decisions, and the Salmon and Steelhead Enhancement Act on those hatcheries. Please describe in detail the status of these studies and any preliminary conclusions reached.

Answer: I am informed by the Fish and Wildlife Service that a plan and time-frame for completion of the study has been developed in consultation with staff of the Appropriations Subcommittees. A notice was published in the Federal Register on February 12, 1985, explaining the purpose of the study and providing an outline for the report (copy attached). Under the current schedule, a draft report will be available for public review in April 1985. Copies of the draft report will be sent to known interested parties and an announcement of availability will be published in the Federal Register.

The Service is proceeding with the study as directed. Major activities currently underway are as follows:

- A contract has been completed with the North Carolina Cooperative Fishery Unit (North Carolina State University) to determine availability of fish and the prospective price structure in the private sector.
- Production and cost data for the National Fish Hatchery System are being compiled and analyzed.
- The proposed Nisqually hatchery (WA), the existing Makah Hatchery (WA), and the proposed Kingsland Bay hatchery (VT) are being evaluated in the study.
- Future production needs for Pacific salmon, Atlantic salmon, lake trout, striped bass, inland trout (brook, brown, and rainbow), and other species are being assessed. This will include attention to needs with respect to the Boldt decisions and potential requirements under the Salmon and Steelhead Conservation and Enhancement Act.

The Service expects to provide the final report to the Congress by July 1985. There are no preliminary conclusions to report at this time.

105. **Question:** I understand the Bureau of Land Management is currently testing a new timber appraisal methodology known as Transaction Evidence Analysis (TEA) on Oregon and California Grant Lands and Public Domain timber lands. Please describe in detail the results of this testing.

**Answer:** The following response was provided by the Bureau of Land Management:

Bureau timber must be sold at not less than the appraised value, and this value must be developed in a manner that ensures that the Government receives a fair price for the timber sold. Historically, most of BLM's timber has been sold competitively utilizing a base appraised value as determined by the "conversion" method. In this method, the end product value of a tract is estimated from timber cruise data. All the costs associated with harvesting and processing (including a factor for profit and risk) are estimated and then subtracted from the end product values to yield an estimate of the value of the timber standing in the forest. This figure becomes the BLM appraised value and is used as the base from which the competitive bidding process begins. Disenchantment with the costly and time-consuming nature of this process, as well as the quality of the results it has provided, has led BLM to explore a number of alternative approaches.

The alternative that shows the most promise in reducing time and cost as well as providing an accurate reflection of market conditions is termed the "Transaction Evidence Analysis" (TEA). In this method, historical timber sales data from a local area are used to estimate timber values on a proposed tract. For each sale used in the historical data base, the final bid price and associated factors such as timber quality, logging difficulty, distance to market, road construction requirements, etc., are collected. These data are then analyzed using a fully computerized, multiple regression technique that identifies those characteristics that are significant in estimating bid value for the localized area and the relative change that will occur in bid value when a significant characteristic changes. This is expressed in the form of a mathematical equation with bid value as the dependent variable. To estimate timber value for a proposed tract, the timber appraiser simply develops information on the significant characteristics for the tract and plugs them into the equation. This technique has undergone testing and refinement by BLM in western Oregon for about 14 years.

Transaction evidence has been in use for appraising negotiated sales, including additions to contracts, in western Oregon for the past 8 years and has operated quite satisfactorily.

If this appraisal approach is used for advertised timber sales it could result in sizable savings to the BLM. These savings would result from a reduction in time required to make an appraisal and also from not having to update and maintain detailed appraisal cost data.

In July of 1984 the BLM began operational testing of the transaction evidence appraisal (TEA) method in western Oregon by advertising one timber sale per district per month using this method. This test will be conducted for one year, and should help to allay the doubts expressed by industry groups concerning the reliability of the technique.

105. (Continued)

Data gathered from July to December 1984 indicate that a TEA can be completed in half the time it takes to complete a conversion type of timber appraisal. Also data gathered during this same timeframe indicate that the TEA estimated value is closer to the bid price than the conversion type of appraisal. The following table illustrates this point.

Average Value Per Thousand Board Feet (MBF)
All Species

| Conversion Appraisal | TEA Appraisal | Actual Bid Price |
|---|---|---|
| $52.91 MBF | $75.65 MBF | $87.04 MBF |

If this trend continues, the BLM may consider implementing the TEA for all advertised timber sales in western Oregon. The techniques could also be used on public domain sales in areas where competition and good market history data exist.

Question: Please provide a detailed list and maps of Public Domain lands in Washington State. Please describe in detail the efficiencies possible by transferring these lands to the Forest Service.

Answer: A list of the Public Domain (PD) land acreages by county is provided below. We are forwarding separately two Washington State road maps with the land indicated in orange color where concentrations of PD lands are found. Much of the land is scattered throughout the State. BLM does not have a large scale map displaying PD lands; however, several small scale maps covering local areas of the State with PD lands could be made available from our State Director's Office in Portland, if requested. It would take about 30 maps for complete State coverage.

The obvious efficiencies of transferring responsibility for management are the cost savings related to vehicle travel and per diem required by BLM to manage numerous scattered small tracts of PD lands from the BLM offices in Spokane and Wenatchee. Managing these lands in conjunction with the management of nearby blocks of Forest lands would both save money and provide an opportunity for more effective resource management of these lands as part of a broader program effort. An analysis of various other savings is currently being done by the field implementation teams.

105. (Continued)

## PUBLIC DOMAIN LANDS

### Administered by the Bureau of Land Management

### State of Washington

| County | Acres |
|---|---|
| Adams | 601 |
| Asotin | 10,422 |
| Benton | 17,813 |
| Chelan | 21,434 |
| Clallam | 83 |
| Clark | 5 |
| Columbia | 519 |
| Cowlitz | 52 |
| Douglas | 37,520 |
| Ferry | 11,967 |
| Franklin | 17,367 |
| Garfield | 433 |
| Grant | 37,129 |
| Grays Harbor | 13 |
| Island | 2 |
| Jefferson | 90 |
| King | 347 |
| Kitsap | 0 |
| Kittitas | 16,009 |
| Klickitat | 17,402 |
| Lewis | 279 |
| Lincoln | 6,974 |
| Mason | 3 |
| Okanogan | 55,009 |
| Pacific | 374 |
| Pend Oreille | 1,904 |
| Pierce | 12 |
| San Juan | 288 |
| Skagit | 277 |
| Skamania | 328 |
| Snohomish | 170 |
| Spokane | 0 |
| Stevens | 29,813 |
| Thurston | 1 |
| Wahkiakum | 1 |
| Walla Walla | 658 |
| Whatcom | 145 |
| Whitman | 1,334 |
| Yakima | 25,673 |
| Total | 312,451 |

determination. In the absence of any action by the District Manager, this realty action will become a final determination.

**D.K. Swickard,**

*Area Manager.*

[FR Doc. 85-3487 Filed 2-11-85; 8:45 am]

BILLING CODE 4310-84-M

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## Fish and Wildlife Service

### Report to Congress on Artificially Propagated Fish for National Fishery Programs

**AGENCY:** U.S. Fish and Wildlife Service, Interior.

**ACTION:** Notice of Report.

**SUMMARY:** This notice is to inform interested parties that the U.S. Fish and Wildlife Service is undertaking a study mandated by Congress in the Department of the Interior and Related Agencies Appropriations Act, 1985 (Pub. L. 98-473).

**DATE:** A draft report will be available for public comment in April 1985. The comment period will commence with the publishing of an appropriate notice in the **Federal Register**.

**FOR FURTHER INFORMATION CONTACT:** Dr. Joseph H. Kutkuhn, Associate Director—Fishery Resources, U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240, (202/343-6394).

**SUPPLEMENTARY INFORMATION:** The Congress directed the U.S. Fish and Wildlife Service to ". . . prepare a report on additional fish rearing plans and include in that report a comparative analysis of the costs of Service production to private or commercial production. In addition, the report should provide a list of potential new hatchery sites including an evaluation of the Nisqually Tribe hatchery, plans for the future production outputs from the Makah NFH [National Fish Hatchery], and an analysis of the effect of the *Boldt* case decisions, and the Salmon and Steelhead Enhancement Act on those hatcheries. In addition, the study should address other fishery issues including Atlantic salmon and striped bass recovery including the appropriate Federal role. That report should reflect public comment and be provided to the Committees in time for the fiscal year 1986 appropriations hearings."

Displayed below is the outline for the report.

Artificially Propagated Fish for National Fishery Programs—an Analysis of Source, Cost, Purpose, and Need

1. Introduction
2. Survey of Propagation Capability
   - —The National Fish Hatchery System (NFHS)
   - —State and Tribal Hatcheries
   - —Private-Sector or Commercial Operations
3. Comparison of Production Costs
   - —Federal/Service vs. State/Tribal
   - —Federal/Service vs. Private Sector/Commercial
4. Review of Product Use
   - —Fulfillment of Public-Sector Obligations
   - —Settlement of User Conflict
   - —Restoration of Depleted Resources
   - —Mitigation of Resource Impairment
5. Evaluation of Product Demand
   - —Projected Need for Hatchery-Produced Fish
   - —Production and Enhancement Plans
6. Summary of Findings
7. Synthesis of Public Comment
8. References, Appendices

**Robert A. Jantzen,**

*Director, Fish and Wildlife Service.*

[FR Doc. 3513 Filed 2-11-85; 8:45 am]

BILLING CODE 4310-55-M

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## National Park Service

### Intention To Extend Concession Permit

Pursuant to the provisions of section 5 of the Act of October 9, 1965, (79 Stat. 969; 16 U.S.C. 20), public notice is hereby given that thirty (30) days after the date of publication of this notice, the Department of the Interior, through the Regional Director of the National Park Service, proposes to extend a concession permit with Alger G. Willis Fishing Camps, Inc., authorizing it to continue to provide overnight fish camp on Core Banks, auto/passenger service between Davis, North Carolina, and the Shingle Point area of Core Banks for the public within Cape Lookout National Seashore for a period of one year from January 1, 1985, through December 31, 1985. A determination was made that a thirty (30) day response period was sufficient time since the National Park Service is currently in the process of developing a Statement of Requirements (Prospectus) for a long-term concessions authorization to provide these services. The current permit provisions deny a preferential right to the existing concessioner.

This permit extension has been determined to be categorically excluded from the procedural provisions of the National Environmental Policy Act and no environmental document will be prepared.

The Secretary will consider and evaluate all proposals received as a result of this notice. Any proposal, including that of the existing concessioner, must be postmarked or hand delivered on or before the thirtieth (30th) day following publication of this notice to be considered and evaluated.

Interested parties should contact the Regional Director, Southeast Region, Atlanta, Georgia, for information as to the requirements of the proposed permit.

**Robert Baker,**

*Regional Director, Southeast Region.*

[FR Doc. 85-3808 Filed 2-11-85; 8:45 am]

BILLING CODE 4310-70-M

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### National Register of Historic Places; Pending Nominations

Nominations for the following properties being considered for listing in the National Register were received by the National Park Service before February 2, 1985. Pursuant to § 60.13 of 36 CFR Part 60 written comments concerning the significance of these properties under the National Register criteria for evaluation may be forwarded to the National Register, National Park Service, U.S. Department of the Interior, Washington, DC 20243. Written comments should be submitted by February 27, 1985.

**Carol D. Shull,**

*Chief of Registration, National Register.*

**CALIFORNIA**

**Fresno County**

Reedley, *Reedley National Bank,* 1100 G. St.

**Humboldt County**

Bayside, *Old Jacoby Creek School,* 2212 Jacoby Creek Rd.
Loleta, *Bank of Loleta,* 336 Main St.

**Los Angeles County**

Hollywood, *Hollywood Masonic Temple,* 6840 Hollywood Blvd.
West Hollywood, *Ronda,* 1400-1414 Havenhurst Dr.

**Modoc County**

Alturas, *NCO Railway Depot,* East and 3rd Sts.

**Sacramento County**

Sacramento, *Lais, Charles, House,* 1301 H St.

**Santa Clara County**

Santa Clara, *Santa Clara Depot,* 1 Railroad Ave.

106. Question: Your budget request for health and safety technology shows a reduction of $9.3 million from the cost of continuing current 1985 services and programs in 1986. With the exception of an increase in requested funds for research in explosives, you are requesting a reduction in funding for all other areas of health and safety technology. In light of the recent tragic fire in Utah, in which 27 miners lost their lives, how do you justify reductions specifically in the areas of fire and explosion prevention, as well as postdisaster survival and rescue?

Answer: The reduction in fire and explosion prevention research of $12,000 does not reduce the program level of effort in that area. This decrease is due primarily to the proposed 5 percent pay reduction. For postdisaster research, continued funding is not expected to result in any substantial improvement in rescue technology, as the technology in this area is basically mature.

107. Question: In the Appendix to the FY 1986 Budget, the Department cites several areas in which research has been completed. Among these are: methane control, postdisaster survival and rescue, and ventilation. What does the Department plan to do to implement their research findings out in the field?

Answer: Research results in these programs have been and will continue to be provided to the mining industry through the on-going technology transfer efforts of the Bureau. These include seminars, Technology News articles, research reports, and articles in industry publications covering Bureau research.

108. Question: Coal is our Nation's most abundant mineral resource. Considering the current glut of coal, why is the Department requesting an increase of $3.8 million for technologies to cover coal deposits? This request seems inappropriate in view of severe budget cutbacks in other areas such as health and safety technology.

Answer: The proposed research program in coal mining technologies is focussed on long-term needs which will have to be addressed if production of coal by underground methods is to occur in an economically competitive and environmentally responsible fashion. Overall, the proposed funding for coal mining technology research represents a significant reduction from the FY 1985 appropriated funding level, a decrease of $3.5 million resulting from the completion of equipment development work.

109. Question: Secretary Hodel, I am very concerned about the administration of the Office of Surface Mining. Chairman Udall, in opening hearings last week on the Fiscal Year 1986 OSM budget, expressed his grave concern about OSM in stating that in his view "the entire strip mining program is in trouble." Business Week concluded that the agency was "crumbling;" the House Subcommittee on Environment, Energy and Natural Resources of the House Government Operations Committee found the agency to be in almost total disarray. Federal courts have isued sweeping injunctions against the Department, finding that it had "flouted the law." Both environmental groups and the industry have publicly criticized the agency as adrift and mismanaged. Prior to his departure, Secretary Clark committed himself personally to help solve the problems of the beleaguered agency. Are you aware of the problem? If so, what do you plan to do?

Answer: I have been briefed on many of the complex and varied issues facing OSM and I am very concerned about the comments expressed by the Congress and by others. Under Secretary McLaughlin is meeting with the Director and the Assistant Secretary for Land and Minerals Management to assure prompt and direct attention to OSM matters. In addition, a joint task force with representatives from the Department and from the House Committee on Interior and Insular Affairs is working to help develop practical management solutions to the issues faced by OSM.

110. Question: Could you inform the Committee when you come up with a plan for addressing these problems?

Answer: The joint task force is expected to complete its review and prepare a report within the coming month. Currently, the task force is meeting weekly with the Under Secretary's office and representatives of the House Committee on Interior and Insular Affairs. The task force has reviewed reports prepared by Congress, GAO, the Department's Inspector General, and OSM, and is interviewing OSM employees, State officials, and outside groups. I am informed that the review is progressing well and is addressing the relevant concerns.

111. Question: I am particularly concerned with the failure of OSM to deal with gross abuse. The irresponsible mining of coal is in no one's interest. I am told that almost half of all Federal cessation orders ever issued have been ignored. Over $120 million in penalties have been similarly ignored. I understand that a Federal judge stepped in and issued a sweeping injunction to force OSM to do something. Twice we have passed supplemental appropriations to implement what is known as the "megabuck" injunction. I understand that you have been briefed on the problem. Are you committed to the effort to enforce the cessation orders?

Answer: I am totally commited to a strong and adequate enforcement and follow-up program. Without such a program we will be unable to effectively control the environmental and public health and safety impacts of surface coal mining. OSM's past record in this area indicates a need for distinct improvement. Its future efforts, however, will not only aim to comply with the recent court orders, but to provide more effective and timely enforcement in the ongoing program. OSM established its new Branch of Compliance to implement court order, and I have directed the joint task force to review OSM's progress in meeting these commitments.

112. Question: What money and manpower would be required, and how long would it take to enforce the cessation orders?

Answer: The Fiscal Year 1986 budget includes $2,018,600 for the Branch of Compliance, the duties of which include reviewing outstanding cessation orders to determine whether and what kind of further alternative enforcement is appropriate. The Director of OSM has informed me that he expects to have the complete history of OSM's alternative enforcement cases loaded into an automated system by the end of the current fiscal year. As these cases are loaded, follow-up measures are being taken in the form of alternative enforcement actions. Furthermore, OSM will be compiling a data base of all active operators over the next one to two years and will tie active companies to past violators, as appropriate, and will inititiate new enforcement actions to force compliance. It may be possible to gain compliance up to 100 of the approximately 2000 unabated orders in a few months; action will be initiated on most orders within two years; in some cases, several years may be needed to complete investigations, initiate litigation and bring the legal process to conclusion.

113. Question: I understand that over 2,800 coal exploration notices have been filed in the State of Kentucky. Many of these are apparently mines masquerading as exploration sites. What commitment has Kentucky made to inspect these sites? What resources have you included in your proposed budget to address this issue?

Answer: According to OSM, they have selected 50 coal exploration sites have been selected for study in order to better define the nature and extent of the problem. The purpose of the study is to enable OSM to provide guidance to the State on how to address the problem. A plan and schedule will be developed after completion of the study. OSM has not allocated or requested additional resources because it is the State's responsibility to take enforcement action, and OSM has resources to conduct the study and provide guidance. Although a detailed plan must await the results of the study, OSM has already begun discussions with the State concerning the need to inspect alleged exploration sites. OSM expects to complete the study by mid-April, and to then complete a plan with the State a few weeks thereafter.

114. Question: I further understand that there are between 1,000 and 2,000 unreclaimed sites against which no enforcement action was taken, other than the forfeiture of an inadequate bond. What resources are included in the budget for inspecting these sites?

Answer: According to OSM, forfeiting bonds on minesites results from prior enforcement actions that have not been abated. Bond forfeiture is one of the final actions to be taken against a permittee and usually is a direct result of or accompanies a permit revocation for failure to comply. The current status of the total number of forfeited sites is not available at present, but will be collected through the 1985 State program evaluations. It is important to understand that the vast majority of bonds forfeited to date are not permanent program bonds, but are remanents of State bonding programs on sites that have not been repermitted under the permanent regulatory program. OSM plans no special inspection efforts for these sites other than acquiring data on their extent.

Question: What resources are included in the budget for assuring that those responsible for these sites do not mine coal until they have corrected their past abuse?

Answer: Director Ward informs me that it will develop a system to assure that no permit applicant who has an unresolved enforcement action will receive new permits, including those who are cited for inadequate reclamation. Many States already communicate with one another on forfeitures and maintain a permit block system to deny permits to those responsible for past forfeitures. OSM will build upon this approach to ensure that violators from one State do not receive permits in another.

115. **Question:** I understand that your original budget submission within the Department included a proposal for additional inspectors. Specifically, how many inspection positions did your original budget contain?

**Answer:** Director Ward informs me that its original proposal did not include a proposal for additional inspectors.

**Question:** Who reduced the number of requested positions, and why?

**Answer:** Director Ward informs me that its 1986 request reflects a reallocation of positions from its original proposal rather than a decrease *per se*. After the 1986 proposal was submitted to OMB, OSM identified the need to increase staff for assessments and collections activities as a result of the settlement of the Parker and Gasch court orders.

**Question:** Have you made any estimates of the need for inspectors to deal with the problems, such as the abuse of the two-acre exemption, coal exploration sites which are actually active mining operations, and unreclaimed sites for which there have been bond forfeitures? If so, how many inspectors did you estimate are needed?

**Answer:** OSM is committed to State primacy and to support the States' program administration and enforcement efforts. When a State does not respond adequately to problems such as those cited, OSM can and will act; however, OSM consider the current number of inspectors to be adequate to deal with these problems. OSM's evaluation and assistance efforts are designed to identify problems such as these, and having done so, to oversee and assist the States in correcting them. These efforts are adequately staffed at the currently authorized level.

116. **Question:** I understand that there are a thousand or so two-acre mines in Virginia which the State refuses to inspect. What resources are there in your proposed budget to enable OSM to inspect these mines? Can you make a commitment to this Committee on the rate at which OSM will inspect these mines?

**Answer:** Director Ward informs me that, at this time, no additional funds have been included in the Fiscal Year 1985 and 1986 budgets to inspect and enforce against the two-acre sites not regulated by Virginia under Chapter 23 of the Code of Virginia. There were only 137 of these Chapter 23 sites. OSM estimates that under existing resources, the OSM Big Stone Gap Field Office, after accomplishing its current functions relating to oversight inspections, responding to citizen's complaints, etc. could conduct ten inspections per month of two-acre sites.

117. Question: I understand that there are between 1,500 and 2,000 two-acre mines in Kentucky. At what rate will the State inspect these mines?

Answer: According to OSM, the State is under a grant condition to review all 1,500 two-acre sites by July 30, 1985. The State is using a special task force, separate from its regular inspection force, to review the sites using certain criteria to which the State and OSM have agreed. The State has cited 25 of the first 62 reviewed under this special assignment. These 25 have been issued notices of violation for operating without a permit, and are required to either reclaim to permanent program standards or obtain a permit.

Question: What resources are included in your proposed budget for overseeing Kentucky's response to this problem?

Answer: According to OSM, it can oversee this operation with existing staff at a statistical confidence level of approximately 90 percent.

118. Question: We are all aware that the courts have ruled against Secretary Watt's changes to the Federal surface mining regulations. Are there resources in the Fiscal Year 1986 budget that comply with the new revision order, and if so, what are they? Can you tell me when these revisions will take place? Before primacy can be returned to the State?

Answer: Director Ward informs me that its regulatory reform effort involved changes to 670 individual sections in various parts of its technical regulations. The respective lawsuits filed in opposition to these changes were consolidated by the District Court and divided into three rounds. To date, the Court has ruled on Round I and Round II issues. The Court decisions in Rounds I and II require repromulgation of approximately five percent of all sections of the technical regulations revised under regulatory reform. Most of the rules needed to comply with Rounds I and II Court Orders will be proposed in Fiscal Year 1985. OSM anticipates that final rules to complete compliance with Rounds I and II decisions will be published during the first quarter of Fiscal Year 1986. These final rules and any actions that may be required under Round III will be supported through resources budgeted in Fiscal Year 1986 in the "Regulations Review and Revision "component of the Technical Services and Research subactivity, which includes $275,000.

State primacy was not affected by decisions made as a result of the Court rulings.

Question: OSM removed Oklahoma's inspection and enforcement authority. The agency states that it expects to return full authority to the State by October 1985. The budget for Fiscal Year 1986 reflects this decision. What conditions must be met as a basis for returning full primacy authority to Oklahoma?

Answer: The Director of OSM has informed me that OSM's decision to return full program authority to Oklahoma will be based on the State accomplishing, to the satisfaction of OSM, all remedial action requirements listed below:

1. A permitting plan ensuring that:

   - permit applications are reviewed in accordance with all approved program procedures.

   - bond calculation and bond release determinations are made in accordance with approved program procedures.

   - Oklahoma staff involved in reviewing permit applications have the necessary technical expertise.

   - the State's permitting section is adequately staffed with a qualified full-time supervisor.

2. An inspection and enforcement plan that addresses the:

   - State's commitment to hire a sufficient number of personnel to comply with the inspection and enforcement requirements of the approved program.

   - State's demonstration that all personnel will be trained and supervised in a manner that will allow adequate implementation of the approved program.

   - State's commitment and demonstration that it will be in full compliance at all times with the provisions of the approved program.

Upon the State's satisfactory completion of the above plans, identification of all oustanding State-initiated enforcement actions and a demonstration of progress in areas of enforcement actions, submission of detailed quarterly progress reports and implementation of adequate tracking systems, a public comment and hearing period will be scheduled. Only after OSM's review of the above material and evaluation of public comments will OSM announce a decision concerning resumption of full program authority by Oklahoma.

Based on draft materials supplied by the State of Oklahoma and discussions with State officials, OSM is encouraged by the progress being made by the State. We anticipate that the permitting plan and the inspection and enforcement plan will be submitted by Oklahoma later this month or in April.

120. Question: Do you anticipate any opposition from the public or from industry over this decision?

Answer: It is very difficult to anticipate the level of public involvement in an issue such as this. Based solely on the interest and level of public participation in past OSM/State proceedings relating to the Oklahoma program, OSM expects a considerable amount of interest and public comment in response to a planned public hearing and public comment period on the State's inspection and enforcement plan and the State's permitting plan.

121. Question: Will you open a public comment period prior to this decision?

Answer: As stated in the April 12, 1984, Federal Register, the Director will schedule a public comment period and hearing on returning full program authority only after he is satisfied that the State has accomplished all remedial action requirements discussed in the response to the previous question. OSM has received a request from an Oklahoma citizen group to conduct a public hearing prior to a decision being made on returning full or partial program authority to Oklahoma. In response to that request, the Director reiterated his plans to hold a hearing and provide interested parties with adequate notification of both the hearing and comment period.

122. Question: If for some reason full primacy is not returned, are there funds in the budget to continue Federal inspection and enforcement actions? If so, how much?

Answer: The budget assumes that Oklahoma will resume full regulatory authority by October 1, 1985. If it proves necessary to extend the Federal program, we will have to seek additional funding for this purpose either through reprogramming, a supplemental budget request, emergency transfer action, or some combination of these alternatives.

123. Question: The statewide practice in Texas of allowing operators to mix topsoil with minespoil that contains acid material was first brought to the attention of OSM in 1983. OSM completed a draft report on this problem in March 1984. A final report has not been finished, and sources claim that this practice still continues. When does OSM expect to release its final study of the Texas topsoil mixing problem?

Answer: I am informed that OSM expects to release the final study by May 31, 1985.

124. Question: Why has it taken OSM over three years to address this problem?

Answer: I am informed that in response to an April 1982 inquiry concerning a request to evaluate Texas' compliance with the topsoiling requirements of State and Federal regulations, OSM's Field Office conducted a review of the Texas Railroad Commission's (TRC) program for permitting topsoil substitution. Based on a preliminary review, OSM's Field Office indicated that the TRC was in compliance with the approved program in authorizing the mixing of topsoil. However, the Field Office's report suggested that an additional detailed technical evaluation of permits be done during the 1983 OSM oversight review of the Texas program. OSM's Western Technical Center began a special study of this issue in the summer of 1983 as part of the process of evaluating the State program with respect to is permitting activities. Extensive preparation time was required for review of permits, review of numerous research findings, interviews with regulatory personnel and academic researchers, analysis of mineral monitoring data and preparation of drafts. The draft report was then subject to extensive peer review and examination, leading to completion of several drafts of the report during the spring and summer of 1984. Since that time, additional information was made available to OSM through the U.S. Department of Agriculture, Soil Conservation Service, the Texas Railroad Commission and others concerned with the study. An analysis of this information has taken additional time; however, OSM anticipates that it will not prevent completion of the study by May 31, 1985.

125. Question: Does OSM have adequate funding for its technical research of this problem?

Answer: Director Ward informed me that OSM performed the special study as part of its evaluation of the State program, utilizing resources available through that program. Much of the data and other information necessary to analyze the topsoil issue is available through the Texas Railroad Commission, the Department of Agriculture's Soil Conservation Service and other agricultural specialists in Texas. OSM does not anticipate additional resources will be needed to complete this study.

126. Question: Does the draft study show that acid materials are being illegally mixed in the top four feet of topsoil? If so, what has OSM done to prevent any further destruction of Texas topsoil productivity?

Answer: According to OSM, the information contained in the draft report indicates that at some mining operations there are instances where acid forming materials had been placed within the top four feet of soil. This occurred in some mining operations where the mixing of topsoil with overburden material was allowed by the Texas Railroad Commission (TRC). The State allowed the soil mixing methods because it believed such methods resulted in reclamation successes meeting the standards of the approved State program. OSM's study is analyzing the State procedures in approving operations which mix topsoil with overburden materials and whether or not such approvals have been based on adequate information to determine the appropriateness of the practice. Until the study is completed and further justification of topsoil practice is available, the State has indicated that it is requiring all operators to stockpile topsoil and is also requiring additional data and analysis of soils and overburden materials. OSM, TRC, the Soil Conservation Service and the coal mining industry in Texas have agreed that more site specific data gathering and evaluation are needed and is presently pursuing that course. It should be noted that the mixing of topsoil with other spoil materials is a pracice allowed under Section 515 (b) of SMCRA and Section 816 of OSM's regulations.

127. Question: After the report is made final, does OSM contemplate assuming permitting authority in the State, or at least, additional oversight of the process? If so, where are the funds to carry out such action?

Answer: I am informed that in the course of the Special Study, OSM's analysis of this issue has been closely coordinated with the Texas Railroad Commission (TRC) and other concerned agencies. Any concerns surfacing during the study process have been dealt with on a positive basis by the State. OSM believes that the State fully intends to use the study as guidance for any actions or changes that may be required in the State's process for evaluating coal mining operations in Texas. Within this framework, OSM does not contemplate any assumption of permitting authority. The extent of any additional oversight will be determined when the study is completed.

128. Question: OSM intends to increase its budget by $1.4 million (with +31 FTEs) by establishing an interagency legal services department. OSM justifies this action by citing new responsibilities resulting from court decisions and its primacy takeover in Tennessee and Oklahoma. Traditionally, this work was the responsibility of DOI's Solicitor's Office. Why does OSM feel the need to establish an in-house legal services team?

Answer: I am informed that the main reasons for the proposal to establish a legal services component are the complexity and short term duration of the workload, resulting in the need for close coordination between legal services and program areas. Under normal circumstances, legal services would be provided by the Office of the Solicitor (SOL). However, in 1986 OSM will incur extraordinary demands for legal services due to the caseload generated by the Federal assumption of the Tennessee and Oklahoma regulatory programs, and the agency's assessment and collections efforts. Inclusion of these services in OSM's budget will enable better coordination of legal services concerned with technical issues in the administration of OSM's responsibilities, and is more administratively efficient than budgeting these services in the Office of the Solicitor's budget.

129. Question: Since this is traditionally the responsibility of the Solicitor's Office, Division of Surface Mining, why are they not assuming this added workload?

Answer: The answer to the previous question addresses this issue.

130. Question: Is this increase of $1.4 million a transfer from the Solicitor's Office budget? That is, did the Solicitor's budget shrink $1.4 million?

Answer: The Solicitor's 1986 base budget was reduced by approximately $2.2 million as a part of the ten percent reduction in the Department's headquarters and administrative expenditures. Included in this reduction was the shifting of $1.4 million of the Office of Surface Mining in order to achieve closer coordination among OSM staff and legal staff for the legal work resulting from the Federal regulatory functions now being performed in Tennessee and Oklahoma and OSM's assessment and collection efforts.

131. Question: Why is there a need for duplicate functions between the two Interior offices?

Answer: There will be no duplication of effort. As noted previously, the legal services component in OSM will address the short term workload. Legal services that are not directly related to these workloads will continue to be provided by the Office of the Solicitor.

132. Question: OSM intends to cut its allocation of state share grants to the states by $46.5 million from last year's level. OSM justifies this cut by stating that they are now allocating more state share grants each year than they are collecting in fees. Therefore, to ensure long-term stability in fund management, it is better to cut back and spread the money out over the years than to continue at present levels and risk a sharper funding decline in the States in the coming years. OSM also claims that the States are not requiring as large an allocation as in FY 1985. If the States have viable AML projects that they are ready and able to reclaim now with this money, how do you justify postponing the clean-up for later years?

Answer: Director Ward informs me that it does not anticipate any project being postponed. State obligation rates indicate that States do not have an immediate need for funding beyond the proposed level. Since 1981, approximately $497 million has been awarded for construction projects, of which $146 million—29.4 percent—has been obligated by the States. The vast majority of 1983 and 1984 grant funds have not been obligated by States, and the 1985 appropriation for grants—the largest ever—will further increase the backlog of unobligated funds. Stable fund management will prevent rapid depletion of State share funds, and allow the States to reduce their high levels of unobligated funds, complete projects that are now awaiting contracting, and conduct design work on future projects. Furthermore, it will ensure the availability of a reserve of funds after 1992 when fees are no longer collected. The reserve is needed because construction grants will be active through 1995, thereby necessitating funding for State administration and program closeout.

133. Question: Due to this reduction, how many proposed AML projects has OSM turned down for funding in the states for next year?

Answer: At the present time, no Fiscal Year 1986 grant requests have been received from the States for any specific projects, and we therefore have not turned down any projects for funding. Although the States may request funding for more projects than the Fiscal Year 1986 appropriation will support, it is extremely unlikely that they would begin work on these projects in that year due to the large remaining unboligated balances of prior year grants. The reduced funding level for Fiscal Year 1986 does not mean that the States will receive less project funding over the life of the program.

134. Question: You claim that the States are not requiring as large an appropriation in Fiscal Year 1986 as in Fiscal Year 1985. Why not? Do the States agree with this statement?

Answer: As noted previously, States have a large backlog of unobligated grant funds, which will increase as 1985 awards are made. With respect to the States' opinions concerning the proposal, OSM informs me that the States are continuing to request a higher level of funding; however, they have not obligated funding at a level that would warrant a higher appropriation.

134. (Continued)

Question: Please submit for the record a list showing a breakdown of how much State share funds each State has requested, and how much OSM has decided to grant.

Answer: The requested information prepared by OSM follows. Please note that these are preliminary estimates submitted by States as opposed to formal applications for funding. They also do not reflect the 1984 and 1985 funds that are now unobligated.

| STATE | Preliminary Fiscal Year 1986 Request (millions) |
|---|---|
| AL | 4.84 |
| AK | 1.03 |
| AR | .42 |
| CO | 2.85 |
| IL | 18.00 |
| IN | 5.95 |
| IO | 4.58 |
| KS | 1.45 |
| KY | 39.97 |
| MD | 2.36 |
| MO | 5.82 |
| MT | 7.23 |
| NM | 2.52 |
| ND | 3.68 |
| OH | 20.77 |
| OK | 3.15 |
| PA | 77.00 |
| TN | 3.34 |
| TX | 2.52 |
| UT | 1.83 |
| VA | 11.68 |
| WV | 43.19 |
| WY | 37.36 |
| IND TR. | 6.25 |
|  | 307.69 |

135. Question: How much has OSM obligated in Fiscal Years 1983, 1984, and 1985 respectively for emergency AML response under the Federal share funding?

Answer: FY 1983: $15.9 million
FY 1984: $19.1 million
FY 1985: $12.7 million (through 1-31-85)

136. Question: How can you claim that OSM only needs $11 million for emergency projects when it is currently spending almost twice as much each year.

Answer: According to OSM, the $11 million figure is an estimate made with the knowledge that an accurate forecast of future needs is very difficult to make. Should the funding prove insufficient, there are mechanisms available by which to secure the necessary support, including the Section 102 transfer authority.

137. Question: If emergency needs are greater than $11 million in Fiscal Year 1986, where will OSM get the money? (It is my information that OMB will not endorse supplementals for Fiscal Year 1986.)

Answer: According to OSM, if additional funding is required, it would consider alternatives such as reprogramming or a supplemental appropriation. In addition, if the Department's 1986 Appropriations Act retains the Secretary's current Section 102 transfer authority for abating emergency situations, this would provide another alternative for securing funds.

138. Question: Has OSM currently depleted its funding for emergency response for Fiscal Year 1985?

Answer: While obligations to date have exhausted the 1985 appropriation, the Secretary has exercised the Section 102 transfer authority to make an additional $11 million available.

139. Question: OSM is once again attempting to abolish the RAMP program despite Congressional support over the years to save the program. They have included funding for FY 1986 only to finish existing projects. OSM has stated it believes that the states are better suited to carry out RAMP-type projects than the Soil Conservation Service (SCS). Currently, RAMP funding comes from the Federal share. If the states assume respnsibility for carrying out the program, it is unclear whether funding will come out of the state share or out of the Federal share. Proponents of RAMP are concerned that if states are expected to fund the program out of the state share they may not choose to fund RAMP-type projects in lieu of their regular priority work. Since OSM believes the states are better oriented to fund RAMP-type projects than the SCS, are you making direct allocations to the states to specifically fund these projects?

Answer: Yes. Director Ward informs me that if a State chooses to request funds specifically for RAMP-type projects as part of a grant application and the grant application is approved, then the state will receive a direct allocation.

140. Question: If the states are expected to assume responsibility for RAMP projects, will they continue to be funded out to Federal share money or state share money?

Answer: Director Ward informs me that RAMP projects will continue to be funded from the Federal share.

141. Question: You recommended that a $6.4 million reduction be made in the RAMP program and that the states have the option to pick up this responsibility. Where in the budget, and how much of the budget has been allocated to the states for this program?

Answer: According to OSM, there are no funds specifically identified for RAMP in the proposal for State Reclamation Program Grants. The amounts to be allocated for reclamation grant activities include a component for RAMP-type projects but specific projects within specific States have not been projected.

142. Question: Since you intend to abolish RAMP, are you requiring the states to take over this responsibility, or are you merely providing them with the opportunity?

Answer: OSM now provides States with the opportunity to set their own priorities with regard to the types of projects for which funds are requested under the grant program. States have the option to give RAMP-type projects the level of attention that Congress originally intended, but they are not required to fund such projects.

Question: If no requirements are made, how are these rural projects assured the adequate consideration for funding and attention that Congress originally intended by establishing RAMP?

Answer: Director Ward informs me that it is true that Congress provided for such projects in the Act. However, Congress also set explicit reclamation priorities in the Act. Given the limited funding available to complete high priority projects, RAMP-type projects must compete for funding against other projects of comparable priority. It is also proper that decisions on which projects to fund be made by the States, consistent with the Act's priorities.

143. Question: Does the Department's FY 1986 budget request include resources for future Federal coal lease sales?
- If so, how much money is requested?
- How many coal lease sales of new production tracts is the Department projecting?

Answer: The Department's budget request includes $1.4 million for the completion of activity planning in two regions and for continuing progress on activity planning in two others. These plans would support possible regional lease sales in FY 1986 and beyond.

For planning purposes, the FY 1986 Budget assumes there will be one regional coal lease sale in late FY 1986. No projections can be made as to types of tracts that may be offered, because no decisions have yet been made on whether future coal lease sales will be held. These decisions will be made after the Supplement to the 1979 Coal Program Environmental Statement is completed and the Secretary makes his program decision, expected in September 1985. If the Secretary decides to continue the existing program, the regional coal teams will review those tracts that were under study when regional activity planning was halted in 1984. Additional review and analysis will be needed before any decisions can be made as to which proposed tracts, if any, would be offered for lease sale. Only when specific tracts have been identified at this time in the process will it be possible to ascertain the number of new production tracts being considered.

144. Question: How many preference right lease applications remain to be processed?
- Is there funding in the FY 1986 budget to process these?
- If so, how much?
- Does this amount represent an increase or decrease from last year's appropriation?

Answer: A total of 130 preference right lease applications remain to be processed. The Department has requested $335,000 in FY 1986 to complete the processing of 67 PRLA's. In FY 1985 the Department requested $265,000 to process 53 PRLA's.

145. Question: What is the status of the National Wildlife Federation v. Burford, a case that challenges the 1982 Powder River coal sale?
- If the leases issued in this sale are ruled invalid, what effect would this have on the Department's revenue?

Answer: I have been informed that two lawsuits challenged the 1982 regional coal sale for the Powder River Region. In Northern Cheyenne Tribe v. Watt, Civil No. 82-116 (D. Montana), the Tribe asserted that the EIS prepared for the sale was deficient because of its alleged failure to discuss adequately the impacts of the regional leasing on the plaintiff's reservation. In National Wildlife Federation v. Burford, Civil No. 82-117 (D. Montana), the plaintiff groups challenge: (1) the pre-sale procedures, alleging that the land use plans underlying the sale acreage were formulated in violation of FLPMA planning standards and that the Secretary's rules (and resulting plans) on the treatment of reclaimability in the Federal lands review under section 522(b) of the SMCRA are legally deficient; and (2) the sale itself, alleging that the Department failed to receive fair market value (FMV) for the lease tracts sold. The cases were originally filed in the U.S. District Court for the District of Columbia, where motion for a restraining

145. ( Continued)

order against the lease sale was denied. On the Government's motion, the cases were consolidated and transferred to the Federal district court in Montana. The State of Wyoming and several lessees have intervened as defendants. The court heard argument in December 1982 on cross motions for summary judgment and motions to dismiss specific allegations. The court has not yet issued its decision.

If the issued leases are ruled invalid, the Department assumes that it will be required to refund all rents and bonuses paid by the lessee. To date, this amounts to nearly $40 million in bonus payments and $200,000 in rents.

Additionally, the Department would forego royalty payments on the unmined coal unless and until the tracts are reoffered for lease. The Government would also seek to recover about $20 million already paid to the States as their 50 percent share of lease rents and bonuses.

146. Question: What are the specific FY 1986 budget implications of the proposed interchange for each Agency? What about FY 1987-89?

Answer: In the President's FY 1986 Budget, the principal implication of the proposed interchange is the transfer of funding for the Oregon and California (O&C) Grant Lands Appropriation Account and the related payments to the O&C counties from the BLM to the Forest Service.

In addition, the President's 1986 Budget contains a preliminary estimate of $16.2 million ($14.4 million in the Forest Service and $1.8 million in BLM) to cover one-time implementation costs (e.g., the costs of moving employees, records, equipment, etc.) which are not expected to be offset by efficiency savings resulting from the proposed interchange. These savings are not expected to begin occurring until late in FY 1986.

In FY 1987, efficiency savings are expected to roughly offset implementation costs which should taper off significantly by the end of the year. In FY 1988, a small residual of implementation costs will probably be incurred. However, most of the $25-$35 million in annual savings would be realized and continue in the years beyond. These estimated costs and savings will depend upon enactment of authorizing legislation, after consultation with the public, interest groups, and the Congress.

The following table reflects the portions of the proposed Interchange Program included in BLM's FY 1986 Budget. These changes reflect largely the proposed transfer of the BLM's western Oregon lands and associated permanent appropriations to the Forest Service.

FY 1986 Budget Effects of BLM/FS Interchange
Bureau of Land Management Appropriations

(in millions)

| Appropriation/Activities |  | FY 1984 Actual | FY 1985 Estimate | FY 1986 Estimate | Change Amount | Change % |
|---|---|---|---|---|---|---|
| Oregon & California Grant Lands | $ | $48.5 | $54.3 | --- | -$54.3 | -100 |
|  | (FTE) | (1,021) | (998) | (---) | (-998) | (-100) |
| Miscellaneous Permanent Appropriations | $ | $66.2 | $85.5 | $12.4 | -$73.1 | -86 |
| Management of Lands and Resources (MLR): |  |  |  |  |  |  |
| Forest Management - Western Oregon P.D. | $ | 0.9 | 0.9 | --- | -0.9 | -100 |
|  | (FTE) | (---) | (---) | (---) | (---) | (NA) |
| General Administration (BLM/FS Adjustment Costs) | $ | --- | --- | $1.8 1/ | +$1.8 1/ | NA |
|  | (FTE) | --- | --- | (-125) 2/ | (-125) 2/ | (NA) |
| Total | $ | $115.6 | $140.7 | $14.2 | -$126.5 | -90 |
|  | (FTE) | (1,021) | (998) | (-125) | (-1,123) | (NA) |

1/ Funding in MLR represents initial implementation costs only. Any programmatic effects on the funding requested by subactivity and line-item which might be caused by the Interchange Proposal are not reflected in the Budget since the actual impacts by program are not presently known and probably will not occur in FY 1986.

2/ FTE savings would occur in several programs. Actual spread of FTE savings is as yet unclear.

147. Question: You have proposed Appropriations language "for expenses necessary to implement Forest Service/BLM jurisdictional boundary changes and for the administration of Oregon and California Grant Lands..." What is the purpose of such language in advance of any statutory authority to make the land exchange? Do you interpret this Appropriations language as giving you any additional authority to carry out the proposed exchange?

Answer: I am informed that this language appears only in the Forest Service's FY 1986 Budget. However, we do not interpret the language as providing any additional authority to implement the proposed interchange. This adjustment was reflected in the budget to facilitate the transfer in expectation of authorizing legislation being enacted in FY 1986. Public meetings to provide opportunities for public involvement will be held before the legislation necessary to effect the proposed transfer is submitted. There will also be extensive consultation with Congress.

148. Question: Have you conducted any public meetings or hearings in the West concerning the interchange? What has been the general reaction to the proposal?

Answer: BLM has directed its field managers to conduct a series of public meetings or workshops in those geographic locations which may be impacted by the proposed interchange. These meetings and workshops are designed to provide attendees with the overall interchange plan and an opportunity to give their comments on both the plans. These comments will be considered in developing the legislative proposal to effect the transfer.

Question: Have you had any specific comments from the mining industry regarding the proposal to shift BLM's responsibility for mining and mineral leasing activities on Forest Service lands to the Forest Service?

Answer: We have received some inquiries from various mining and mineral industry representatives. These inquiries have expressed some degree of concern about the transfer of the minerals function to the FS. These concerns will be considered in the refining of proposed legislation. The end product will represent the best possible approach to the efficient and effective development of mineral potential on lands administered by both agencies.

149. Question: What level of recreation fees from BLM lands do you estimate collecting in FY 1986?

Answer: Receipts from recreation fees are estimated to be $1 million in FY 1986.

150. Question: Is the Department considering any type of entrance or admission fee for access to BLM lands?

Answer: Whether or not authority for entrance or admission fees for access to selected BLM sites or areas with significant development investments and high recreational use will be included in proposed legislation is still under consideration. The Department plans to consult extensively with the Congress and other affected parties as such proposals are being developed.

151. Question: What types of user fees for BLM lands are you considering? How would you recommend that these receipts be credited or redistributed?

Answer: Under existing authority, BLM charges fees for the use of sites, such as campgrounds, that meet basic criteria established in Section 4(b) of the Land and Water Conservation Fund Act; and fees for special recreation permits for uses such as group activities, organized recreation events and commercial recreational uses of the public lands. It is the Department's position that receipts from such fees should be deposited in a special account and made available to BLM to offset the costs of fee collection, maintenance of certain facilities, and other recreation program operating requirements. Appropriation language changes currently proposed for the "Operation of the National Park System" account would accomplish this purpose.

152. Question: Is the BLM contemplating an increase in fees charged to outfitters and private parties who use units of the Wild and Scenic River System under the Bureau's jurisdiction?

Answer: As part of a change in the recreation fee structure already in place, such fees will increase in 1986. The fees for such activities were established through the publication of the Final Special Recreation Permit Policy in the Federal Register of February 10, 1984. These regulations increase the fee charged to commercial users on a phased basis from 1 percent of gross revenues in 1984 to 3 percent in 1986. The fee for competitive events is determined by either a user day charge or by a percentage of gross receipts, whichever is greater. The fee structures and regulations were developed in cooperation with the Forest Service.

153. Question: How many wild horses and burros has the BLM rounded up since the beginning of this fiscal year?

Answer: I am informed by the BLM that, as of February 28, 1985, approximately 9,000 animals had been gathered and removed from public lands administered by the Bureau of Land Management (BLM). This is slightly over one-half of the animals to be removed in FY 1985.

154. Question: How much of the $16.7 million appropriated by the Congress last year for the Wild Horse and Burro program remains unexpended?

Answer: As of February 28, 1985, approximately $8,350,000 has been expended or is obligated to ongoing contract activities. This is approximately one-half of the FY 1985 appropriation.

155. Question: How do you plan to spend the $1 million appropriated last year for additional wild horse and burro research? What specific types of research do you plan to carry out?

Answer: The following kinds of studies are being proposed to the National Academy of Sciences Committee:

a. Population and cost projections for various horse herd control strategies.

b. Band integrity and breeding structure, as affected by herd density.

c. Fertility control methods for mares.

d. Age-specific foaling and mortality rates.

156. Question: The Department has based its current massive round-up and subsequent feeding program on the assumption that the Congress will enact sale authority for excess wild horses. Is this a reasonable assumption given the fact that in four years the proposal has not been voted on by the Senate or even considered by the House? Do you think it is wise to continue to round up horses with no guarantee that sale authority will be forthcoming?

Answer: The FY 1985 roundup and feeding program is based in part upon the Conference Report on the FY 1985 Appropriations Act, which states:.

> "An increase of $11,000,000 over the budget has been provided to increase the FY 1985 removal rate to 11,000 excess animals and to remove the approximately 6,142 excess animals budgeted for but not removed in fiscal years 1983 and 1984."

The removal effort being conducted in FY 1985 is also needed to continue progress toward attaining the estimated appropriate management level of 25,000 animals. Failure to implement the animal adjustments included in locally developed land use plans significantly hinders resource improvement in many areas where conditions are now unsatisfactory. In addition, failure to capture and remove at least the estimated annual increase (approximately 9,000 animals) would exacerbate existing resource problems and necessitate greatly

156. (Continued)

increased expenditures for removal of excess animals and their progeny in the future. For these reasons, we believe removing a portion of the excess animals in FY 1985 is not only wise but essential.

At present, and continuing into the foreseeable future, we will have insufficient adoption demand for a significant number of the older, less trainable, or otherwise less desirable animals. We will continue to actively pursue sale authority as an alternative to destruction for these excess unadoptable animals.

157. Question: Under the current grazing fee formula, the FY 1982 grazing fee was $1.86 per animal unit month (AUM). The fee was reduced by $.46 per AUM in FY 1983; by $.03 in FY 1984; and by $.02 in FY 1985 to its current level of $1.35 per AUM. Do you believe that these fees should be increased?

Answer: A recommendation on whether to increase grazing fees should be based on the results of the study of grazing fees and public comments on the study. We feel that it is inappropriate to take a position prior to the evaluation of the public comments.

158. Question: According to the recent appraisal study, what should be the current market value for grazing?

Answer: There are many factors that need to be weighed in making that decision, not just the appraisal. This is only one of many considerations that the Administration and the Congress will need to evaluate in its deliberations.

Question: What other factors will you consider in recommending a new grazing fee?

Answer: The grazing fee study considers six factors in evaluating grazing fee options. These are: (1) equity to the U.S. Government which considers the level of receipts and the costs of the program administration; (2) permittee impacts or the costs to the permittee of fee alternatives; (3) equity among livestock producers; (4) the administrative feasibility of fee alternatives; (5) the consideration of nonfederal government and community interests; and (6) multiple use considerations. Other evaluation factors may be developed in the public comment period.

159. Question: Why is the Department proposing to delete the provision enacted by Congress last year regarding the illegal subleasing of grazing permits?

Answer: The Bureau of Land Management advises me that its proposed regulations will make that provision unnecessary. This is a technically complicated matter. As we have regulations pending public review and comment, I plan to wait until I have had an opportunity to gain greater understanding of this issue, including public input before I comment. I will say, however, that the Department will seek an efficient means to rid the system of any abuses without creating unnecessary side effects and inequities for those people playing by the rules of the game.

Question: Have any grazing permits been cancelled as a result of this language?

Answer: No. A proposed action to reduce or cancel a grazing permit for unauthorized use is currently in progress in Arizona. We understand that this case also involves possible illegal subleasing. However, the case is still in process, and all of the facts have not been determined.

160. Question: In the 1986 budget, the National Park Service receipts for recreation fees are to increase approximately 300 percent--from $21.8 million to $61.0 million. How was an increase of this magnitude determined? What are the plans to implement this increase? Have you examined the impact of increased fees on the visitors to the National Park Service areas?

Answer: The Administration is proposing to implement a program of recreation fees that will generate revenues equal to 25 percent of the cost of providing recreation. The 25 percent level is a target achieved by State and local park systems on the average. The National Park Service does not separately account for the cost of providing recreation to park visitors. Accordingly, the $61 million figure was developed as a general estimate of revenues from an enhanced fee program. This estimate assumes entrance fees at levels consistent with those recommended in the 1982 GAO study, a proportional price increase in the Golden Eagle passport, continued comparability adjustments in campground fees, and the imposition of new user fees for certain special services and facilities. Both new recreation fees and increases in established fees would require a park specific review based on the six criteria set forth in the Land and Water Conservation Fund Act as amended. Thus, each fee will be evaluated on the basis of:

-- the public policy or interest served,

-- the direct and indirect cost to government,

-- the benefits to park visitors

-- the comparable recreation fees charged by non-Federal public agencies,

-- the economic and administrative feasibility of fee collection, and

-- other pertinent factors.

The Service's emphasis would be on developing an equitable program of reasonable recreation fees. Prices would be based on comparability with non-Federal public parks and the range of services available to the visitor.

A fee program that meets the above criteria should have a minimal impact on park visitors. The most recent survey of visitor attitudes about fees (1976 by Economic Research Associates) indicated that the public was willing to pay reasonable fees for recreation rather than rely solely on funding from general revenues.

161. No National Park Service projects are being proposed in fiscal 1986 for funding from the Federal Lands Highways Program. This represents a $100 million reduction in the repair, rehabilitation, and reconstruction costs of the roads in the National Park Service.

Question: What is the magnitude of the road reconstruction work identified by the National Park Service?

Answer: The latest Federal Highway Administration NPS road inspection reports indicate that the total requirement to bring all NPS roads up to "good" condition is approximately $1.2 billion.

Question: How will that work now be funded? These dollars presumably revert back to the Department of Transportation and will be expended elsewhere.

Answer: For fiscal 1986 and the foreseeable future, NPS road construction requirements will be requested through the Service's regular Line Item Construction Program.

It is not necessarily the case that any Highway Trust Fund dollars which the NPS does not spend will be expended elsewhere. If the total annual appropriation requested from the Highway Trust Fund is decreased, fewer dollars will be spent.

Question: What are the long-term implications of the Department of the Interior not participating in the Federal Lands Highways Program?

Answer: With respect to the National Park Service road system, future NPS road construction will be requested through the Service's regular Construction Program. It is likely that the funding level of annual road and bridge rehabilitation and construction will be less than the accelerated pace during the last 3 years of the Federal Lands Highways Program.

162. Question: This budget proposes a three-year moratorium on land acquisition. What is the present backlog of land acquisition in the National Park Service? Will the moratorium result in deterioration of the resources which the National Park Service is directed to protect? Will this result in significantly higher expenditures once the moratorium on acquisition is lifted?

**Answer: I am informed by the National Pak Service that the present backlog of land acquisition is estimated at $507 million based on authorized appropriation levels. Backlog based on rough estimates to acquire authorized areas without regard to authorized appropriation levels is estimated to be $672 million. (See table provided in answer to question from Senator McClure, question #7.) It is not expected that the moratorium will result in significant deterioration of the resources that the National Park Service is directed to protect. The $5 million requested for land acquisition in FY 1986, and balances available from prior years, will be used to acquire threatened tracts, to help avert deterioration. We anticipate no more than nominal increases in land acquisition costs during the 3-year period of the proposed moratorium.**

163. Expenditures for construction and maintenance are reduced in this budget by approximately $86 million. Reasons cited are the successful completion of maintenance and restoration activities under the Park Rehabilitation and Improvement Act (PRIP).

Question: What is the total cost of the unfunded health and safety projects which have been identified by the National Park Service?

Answer: I am advised that there are probably several hundred million dollars of water, sewer, and electrical system repair projects that have been identified in the Service's multiyear program formulation listing for construction. However, it is very difficult to say exactly how much represents known, verified uncorrected health and safety deficiencies. For example, many project proposals are shown in post-1990 column because it is anticipated that given daily wear and tear, major rehabilitation will be required at that future time. In regard to current or long-standing unmet health and safety needs, the Service believes that the great majority of serious health and safety deficiencies have been corrected or are in the process of being corrected.

Question: How will you correct these deficiencies? Will this necessitate another "PRIP" initiative if these deficiencies are not corrected?

Answer: The Service's fiscal 1986 construction request contains over $35 million to redress known health and safety deficiencies. Certainly, future budgets will also contain similar requests. The Service's annual Repair and Rehabilitation Programs also address health and safety as well as general deficiencies in park facilities. The fiscal 1986 budget request contains over $50 million for Cyclic Maintenance, Cultural Resource Preservation, and Repair and Rehabilitation Program funding.

164. Question: Private organizations are raising money to restore park areas. In Yosemite, the Natural History Association has launched a campaign to raise $52 million to restore facilities and natural areas which are not funded by the National Park Service. Why is this effort and others like it necessary if we have successfully completed PRIP?

Answer: There will probably always be, to a greater or lesser extent, park restoration and improvement proposals which, given anything less than unlimited funding, will remain as unmet objectives. The fund raising campaign at Yosemite represents a worthy and innovative effort to improve the park without additional Federal dollars. However, the Service has not been unmindful of the deficiencies at Yosemite. For example, in fiscal 1982, $4,579,000 was requested for sewage treatment plant construction in Yosemite. In fiscal 1983, $2,358,000 was requested for water system expansion and fire protection. In fiscal 1984, $10,522,000 was requested for sewage collection and disposal facilities. In fiscal 1985, $19,709,000 was requested for additional wate and sewer system rehabilitation and for fiscal 1986, the Service is requesting $6,910,000 to begin rehabilitation of the park's electrical system. The total line item construction requested for Yosemite during the last 5 years exceeds $44 million.

165. Question: As I understand the Department's budget request, you are recommending that $30 million appropriated by the Congress last year from the Land and Water Conservation Fund for federal land acquisition be used for BLM fire fighting activities. Is this the first time you have requested that these funds be used for purposes other than land acquisition? Which projects funded by the Congress will not be funded as a result of this administrative decision?

Answer: No, this is not the first time appropriations from the Land and Water Conservation Fund have been used for this purpose. BLM's FY 1983 fire fighting costs were partly covered by a transfer from the land acquisition funds appropriated to the National Park Service. These funds were repaid in full to the Land Acquisition account by a FY 1984 supplemental appropriation. The Service has not yet determined which land acquisition projects it would recommend be deferred to absorb the transfer. In addition, I will personally review any further recommendations before final decisions are made on this matter.

166. Question: For the fourth year in a row, the Administration is requesting a significant reduction in the "Renewable Resources Management" account and an increase in the "Onshore Energy and Minerals Management" account. While I understand that this allocation reflects the Administration's overall management philosophy, I am concerned that such an unbalanced approach will, over time, make it harder to do the very things that have the highest funding priority. For example, funding and resource data might not be available to prepare studies or environmental statements associated with energy development. Do you have any comment on these concerns?

Answer: The Bureau utilizes the "benefiting activity" concept in its budget development and budget execution processes. This means that the budget request for a particular program activity includes funding for supporting work. For example, the funding request for the coal program includes funds for specialists such as wildlife biologists, soil scientists, and hydrologists to supply input to coal environmental assessments.

167. Question: If the $100 million reduction from the highway trust fund for park roads is included, this year's National Park Service budget request represents a 33 percent decrease from the amount appropriated last year. Historically, the Park Service has often been faced with cycles of relatively higher funding followed by huge cuts. This occurred with Mission 66 and to a lesser degree with the Bicentennial Land Heritage Program. Now it has occurred again with the Park Restoration and Improvement Program. In each instance, these periods of significantly increased funding have been followed by dramatic funding reductions.

It seems to me that this "feast or famine" syndrome is simply not in the best interest of the Park Service or the units of the Park System. Do you share this concern? How would you suggest we rectify this situation?

Answer: It should be recognized that the large decreases proposed in the fiscal 1986 budget do not involve any significant shifts in base operating funding. The large decreases involve the Highway Trust Fund Road Program, the Construction Program and the Land Acquisition Program. These reductions, therefore, basically involve the purchase of land, and the construction or reconstruction of facilities can be deferred without causing irrevocable harm to the Service's infrastructure or basic operations. Given the need to control the Federal deficit, these reductions are not unreasonable.

168. Question: As I understand it, you are in the process of making a decision on the conversion of certain oil and gas leases to tar sands leases in an area of the Glen Canyon National Recreation Area known as the Tar Sands Triangle, Utah. These conversions could be make subject to the combined provisions of the Hydrocarbon Leasing Act of 1981. This Act permits the conversion of these leases within Glen Canyon only if you make the determination thet tar sands extraction will have no significant adverse impact on the National Recreation Area.

Given the statement at your confirmation hearing that you pledge to "not permit or support development activities such as mining . . . in the National Parks," can I assume that you will not permit this conversion to take place?

Answer: I will not allow any lease to be converted that would have adverse impacts on the Recreation Area and will consider all alternatives before approving any conversion.

169. Question: On February 25, the Department issued final regulations for the management of BLM wilderness areas. One of the provisions of the regulations seems to differ significantly from the BLM's interim wilderness management policy and the Forest Service's wilderness management regulations.

Under the BLM regulations, it appears that mining operations within BLM wilderness areas may be permitted to proceed without first making an on-site validity examination to ensure that the claimant has in fact made a valuable mineral discovery. The BLM's regulations would permit mining to commence if the BLM mineral examiner simply confirmed the existence of a "mineral exposure" located prior to the withdrawal and concluded that the proposed mining operations would not prevent the continued preservation of the wilderness area. This seems to me to be a much weaker test that could lead to significant mining activity within the wilderness areas.

Are you aware of this regulation? Do you believe it is consistent with your statement at your confirmation hearing that you will not permit mining within designated wilderness areas?

Answer: These regulations were signed by the Department prior to my confirmation. In order to address the concern, I have requested a review of the subject regulations to assure they do not create "a loophole," as some have suggested, and that they do not contravene my position that there should not be drilling, mining, or timber harvesting in designated wilderness areas.

170. Question: OSM has based its budget recommendation on the stated position that it intends to return primacy back to Tennessee on June 1, 1986. If this is true, why has the Department proposed a rescission of $2.9 million, the amount of the State Reclamation Program Grant that was to have been awarded to Tennessee?

Answer: The rescission is proposed for 1985, during which the State will not have primacy.

171. Question: What conditions must be met to return primacy to Tennessee by June 1, 1986?

Answer: OSM has provided the following: The State has indicated that it would like to reassume primacy by October 1986, and has prepared a schedule of program development activities which would lead to primacy by that date provided the State's program submission is approved by the Secretary. To reassume primacy, Tennessee must submit a program which demonstrates that it has the capability of carrying out the provisions of the Surface Mining Control and Reclamation Act. Specifically, Tennessee would be required to:

- Establish laws which provide for the regulation of surface coal mining and reclamation operations.
- Provide sanctions for violations of State laws, regulations or conditions of permits.
- Provide for the effective implementation, maintenance and enforcement of a permit system.
- Establish a process for the designation of areas as unsuitable for surface coal mining.
- Establish a process for coordinating the review and issuance of surface coal mining permits with any other Federal or State permit process applicable to the proposed operations.
- Provide rules and regulations consistent with regulations consistent with regulations issued by the Secretary.
- Provide a regulatory authority with sufficient administrative and technical personnel and sufficient funding to operate a program

OSM has committed to assist the State in preparing a formal program submission. In this regard, OSM provided comments to the State on a draft proposed statute on January 4, 1985.

Upon submittal by Tennessee of a formal program submission, OSM will initiate the review and approval process set forth under Section 732 of the Federal regulations.

Question: Is there any public opposition to the return of primacy?

Answer: I am unaware of any public opposition to returning primacy to Tennessee. However, a public hearing will be held at a later date to solicit public comment.

172. Question: Is OSM obligated to open a public comment period on the matter?

Answer: OSM will review any formal program submitted by Tennessee in accordance with the procedures and criteria set forth under Section 503 of the Act and Section 732 of the Federal regulations. Those procedures provide for a public comment period and a public hearing on the State's submission. In making a decision to approve or disapprove the State's submission, the Secretary will consider the Director's recommendations and findings, the views of other Federal agencies, public comments and any other relevant information.

173. Question: Is it necessary for a bill to pass the Tennessee State Legislature before primacy can be returned to the State?

Answer: Yes. The Tennessee Legislature must pass new legislation.

Question: If yes, where will you get the funds to continue operating the Federal program for FY 86 if a bill is not passed in the State Legislature?

Answer: If a bill is not passed and the resumption of primacy is delayed, the Secretary can obtain funds using various alternatives such as reprogramming, supplemental, possible emergency transfer authority to provide support for continuing the Federal regulatory program.

174. Question: The company that has contracted to do the pilot bore has material on site, has ordered drilling equipment, and can mobilize a construction crew in short order. It is being paid $200,000 a month for just sitting. Have you considered the question of contract liability and how much it will cost the government to terminate this contract?

**Answer:** I am advised that the National Park Service and the Federal Highway Administration have considered the question of contract liability in issuing the stop order to halt all present work on the Cumberland Gap Tunnel project. The contract for phase I of the project was awarded to Crosstown Contractors on November 20, 1984, and work started at the site on December 6, 1984. Crosstown Contracts are currently waiting for a final decision on the contract. Assuming the contract is terminated, the costs and damages incurred by the contract will cost the Federal Government an estimated $2.0 million. We view this cost as a reasonable alternative to spending the full amount required to complete the project.

175. Question: Once again, the Department has requested zero funds for the Mineral Institutes program which was reauthorized by Congress last year. The Department's rationale is that there are adequate sources of public and private funding to meet the program objectives. How much total money was received by the Mineral Institutes from private and other non-Federal sources in FY 1985?

Answer: Mineral Institutes, and related mineral departments at the schools where Mineral Institutes are located, receive funding from the States, private institutions and corporations, and Federal agencies (other than the Bureau of Mines). In a recent survey conducted in 1984 at the request of Congressman Mollohan, the Bureau of Mines asked for data, on a voluntary basis, from the Institutes and found the level of funding support for mineral activities at departments of mineral science and technology to be about $88 million. It is expected that this approximate level of funding will continue in FY 1985, although no formal survey is being conducted.

176. Question: What portion of the estimated $9.4 million in FY 1985 will go to the five Generic Mineral Technology Centers that were created in 1982?

Answer: The five Generic Mineral Technology Centers are expected to share approximately $4,385,000.

177. Question: What steps do you intend to take to ease the transition from Federal to private and other non-Federal funding for the Mineral Institutes program?

Answer: The Mineral Institutes and other mineral-related departments at schools where Mineral Institutes are located currently are receiving funding from non-Federal sources, such as State funding and private grants, as well as Federal contracts. In addition, the allotment grants made in FY 1985 by the Bureau of Mines are expected to be available through June of 1986, and the research grants made in FY 1985 to the five Generic Mineral Technology Centers should be available through September of 1987.

178. Question: Do you project that the current number of Institutes (31) will decline as a result of the criteria set forth in H.R. 4214 as a basis for eligibility for mineral institute status?

Answer: It is not expected that the criteria set forth in H.R. 4214 (P.L. 98-409) will result in a decline in the current number of Mineral Institutes. Section 10(b) of P.L. 98-409 states that, notwithstanding this criteria: "those colleges or universities which, on the date of enactment of this Act, have a mining or mineral resources research institute program which has been found to be eligible pursuant to title III of the Surface Mining Control and Reclamation Act of 1977 (91 Stat. 445) shall continue to be eligible pursuant to this Act for a period of four fiscal years beginning October 1, 1984."

179. Question: The Department usually includes in the budget documents a table showing the proposed allocation of state reclamation program grants to each state. Has the Department prepared such a table, and if so, why was it not included? Please provide a copy of it for the record.

Answer: This table was not prepared for the Fiscal Year 1985 Budget Justifications, nor has it been prepared for the 1986 proposal. No decisions on State grant amounts will be made until enactment of the appropriation and submittal and analysis of State grant appliactions.

180. Question: Under the Surface Mining and Reclamation Act of 1977, each state with an approved reclamation program is entitled, subject to appropriation, to receive 50 percent of the monies in the Abandoned Mine Reclamation Fund derived from mining within that State. The Department shows a 1986 estimate of $211 million for the State abandoned mine land reclamation program grants. How does OSM determine the amount going to each State? What are the criteria used?

Answer: Grant allocations for the States are based on several factors:

- The estimated State share balance,
- The estimated State portion of the proposed apportionment of the Secretarial share of the AML Fund,
- If further reduction is needed to meet appropriated level, the State's percentage of the national total applied to whatever appropriation is made.

181. Question: Will any such apportionment be sent to this Committee for review before it is made final?

Answer: Director Ward informs me that we are committed to consulting with the Appropriations Committees prior to a final determination on a new apportionment methodology, and will be pleased to consult with this Committee if you so desire.

182. Question: How much will my State of Kentucky be allocated in the form of reclamation program grants? How does this amount compare with the amount to be allocated to Pennsylvania?

Answer: Grant awards cannot be determined until after enactment of the appropriation. No allotment has been made for Fiscal Year 1986.

183. Question: How does the amount proposed to be allocated to Kentucky in Fiscal Year 1986 compare to the amount allocated in Fiscal Year 1985?

Answer: The Commonwealth of Kentucky was allotted $36.22 million for Fiscal Year 1985. No allottment has yet been made for Fiscal Year 1986.

184. Question: What types of reclamation projects does Pennsylvania intend to use its grants for?

Answer: According to OSM, projects address areas that include:

Backfilling of mine openings (abandoned shafts and/or slopes)
Subsidence
Highwall elimination
Water pollution and acid mine drainage
Underground mine fires
Refuse banks
Abandoned ponds elimination

185. Question: What percent of the total allocation will go to Pennsylvania?

Answer: This will not be determined until enactment of the appropriation.

186. Question: How does the Department explain the high degree of disparity between the level of grants allocated to Pennsylvania versus my State of Kentucky and other States?

Answer: Director Ward informs me that because of the abnormally high amount of past mining in the State of Pennsylvania, the State has a larger number of projects under the AML program.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

187. Expenditures for construction and maintenance are reduced in the National Park Service budget by approximately $86 million nationwide. Reasons sited are the successful completion of maintenance and restoration activities under the Park Rehabilitation and Improvement Act (PRIP). I know for a fact that restoration activities, including many health and safety items, are badly in need of funding at the Hot Springs National Park, which I spoke to you about yesterday.

Question: I would like to know what is the total cost of the unfunded health and safety projects which have been identified by the National Park Service?

Answer: There are probably several hundred million dollars of water, sewer, and electrical system repair projects that have been identified in the Service's multiyear program formulation listing for construction. However, it is very difficult to say exactly how much represents known, verified uncorrected health and safety deficiencies. For example, many project proposals are shown in post-1990 column because it is anticipated that given daily wear and tear, major rehabilitation will be required at that future time. In regard to current or long-standing unmet health and safety needs, the Service believes that the great majority of serious health and safety deficiencies have been corrected or are in the process of being corrected.

188. Question: How will you correct these deficiencies (i.e., will another PRIP initiative be required)?

Answer: The Service's fiscal 1986 construction request contains over $35 million to redress known health and safety deficiencies. Certainly, future budgets will also contain similar requests. The Service's annual Repair and Rehabilitation Programs also address health and safety as well as general deficiencies in park facilities. The fiscal 1986 budget request contains over $50 million for Cyclic Maintenance, Cultural Resource Preservation, and Repair and Rehabilitation Program funding.

189. Question: The Park Service has been working on the advanced planning and design of the Hot Springs National Park for over 10 years. Completion is scheduled for August 1, 1985. There are no construction or project planning funds scheduled in the 1986 program for Hot Springs National Park. When are the bathhouses at Hot Springs National Park scheduled for project planning and construction?

Answer: A General Management Plan for Hot Springs National Park was prepared nearly a decade ago. Since then, the bathing industry has nearly collapsed as four bathhouse concessions have closed down, leaving only two concessioners, who are experiencing financial difficulty. Given these developments, the National Park Service decided in 1983 to begin a new Development Concept Plan for the park to explore new options for the preservation and revitalization of the historic bathhouse area. Specifically, the NPS hopes to use the new Historic Property Leasing Program to secure private sector investment in restoring and operating appropriate businesses in these bathhouses. A project to convert one bathhouse into an interpretive center is planned, but the exact scope of this project will depend on whether lessors can be found for the remaining bathhouses. If no lessors are found, the Service will provide all necessary preservation treatment.

190. The National Park facilities in Hot Springs lie along main street in the center of town creating severe congestion and road maintenance problems. Hot Springs National Park and the town of Hot Springs, which are one in the same, are badly in need of planning and construction funds to mitigate the effects of these conditions.

No National Park Service projects are being proposed in fiscal 1986 for funding from the Federal Lands Highways Program. This represents a $100 million reduction in the repair, rehabilitation, and reconstruction costs of the roads in the National Park Service.

Question: What is the magnitude of the road reconstruction work identified by the National Park Service?

Answer: The latest Federal Highway Administration NPS road inspection reports indicate that the total requirement to bring all NPS roads up to "good" condition is approximately $1.2 billion.

191. Question: How will that work now be funded? These dollars presumably revert back to the Department of Transportation and will be expended elsewhere.

Answer: For fiscal 1986 and the foreseeable future, NPS road construction requirements will be requested through the Service's Regular Line Item Construction Program.

It is not necessarily the case that any Highway Trust Fund dollars that the NPS does not spend will be expended elsewhere. If the total annual appropriation requested from the Highway Trust Fund is decreased, fewer dollars will be spent.

192. Question: What are the long-term implications of the Department of the Interior not participating in the Federal Lands Highways Program?

Answer: With respect to the National Park Service road system, future NPS road construction will be requested through the Service's Regular Construction Program. It is likely that the funding level of annual road and bridge rehabilitation and construction will be less than the accelerated pace during the last 3 years of the Federal Lands Highways Program.

193. Question: I'm very concerned with the enforcement in some States of the Surface Mining Control and Reclamation Act (SMCRA). We are now seeing a return of systemic mining abuse of pre-Act severity. Enforcement problems are mounting in every state. I would like to know, Mr. Secretary, what you intend to do about all this? Will you take a direct role in over-seeing the management of these growing problems as Secretary Clark had done?

Answer: I share your concerns about the implementation of the Surface Mining Control and Reclamation Act. However, I believe that a great deal of progress has been made both by States with primacy and by the Office of Surface Mining in addressing identified abuses and problems encountered in administering this program. My office monitors all critical objectives of the OSM through the Department's Management By Objectives system. In this regard, specific objectives related to evaluating State performance, primacy efforts of Oklahoma and Tennessee, the Abandoned Mine Land fee collection system, the civil penalty collection program, and the Parker/Gasch settlement agreement are of primary concern. I also have created a task force that is now examining OSM's operations and will soon submit recommendations for management improvements. In addition, the Under Secretary is meeting with the Director of OSM to assure that the agency's objectives receive the attention and priority and priority they deserve. I plan to be involved when my direct input is necessary to the successful accomplishment of these objectives.

194. Question: As we all are aware, the courts have rules against Secretary Watt's changes to the Federal surface mining regulations. Where in the Fiscal Year 1986 budget are there resources to comply with the new revision order? When will these revisions take place?

Answer: According to OSM, the Technical Services and Reasearch subactivity includes the resources ($275,000 in the "Regulations Review and Revision" component) necessary to accomplish regulatory revisions. With respect to the revisions, it is important to understand that OSM's regulatory reform effort involved changes to 670 individual sections in various parts of its technical regulations. The respective lawsuits filed in opposition to these changes were consolidated by the District Court and divided into three rounds. To date, the Court has ruled on Round I and Round II issues. The Court decisions in Rounds I and II require re-promulgation of approximately five percent of all sections of the technical regulations revised under regulatory reform. Most of the rules needed to comply with Rounds I and II court orders will be proposed in Fiscal Year 1985. OSM anticipates that the final rules to comply with the Rounds I and II decisions will be published during the first quarter of Fiscal Year 1986.

195. Question: In justifying your $46.5 million reduction of state share grants, you claim that it is necessary for the stability of the fund's management. If the states have viable abandoned mine land projects that they are ready and able to reclaim now with this money, where is the justification for postponing the clean-up for later years?

Answer: Director Ward informs me that he does not anticipate any AML project being postponed to later years. State obligation rates indicate that States do not have an immediate need for funding beyond the proposed level. Since 1981, approximately $497 million has been awarded for construction projects, of which $146 million—29.4 percent—has been obligated by the States. The vast majority of 1983 and 1984 grant funds have not been obligated by States, and the 1985 appropriation for grants—the largest ever—will further increase the backlog of unobligated funds. Stable fund management will prevent rapid depletion of State share funds, and allow the States to reduce their high levels of unobligated funds, complete projects that are now awaiting contracting, and conduct design work on future projects. Furthermore, it will ensure the availability of a reserve of funds after 1992 when fees are no longer collected. The reserve is needed because construction grants will be active through 1995, thereby necessitating funding for State administration and program closeout.

QUESTIONS SUBMITTED BY SENATOR METZENBAUM

196. Question: The fiscal year 1985 energy and water appropriations bill contained language directing the Inspector General in the Department of the Interior "to schedule for audits the accounts of all major Reclamation projects completed or under construction in order to verify their financial status in accordance with generally accepted accounting principles, during fiscal year 1985 through 1987." (a): What steps has the Department and/or the Inspector General taken to comply with this directive?

Answer: The power systems of major Reclamation projects are regularly audited by private accounting firms under contract with the Western Area and Bonneville Power Administrations. We have arranged for an expansion of the contract audit scope to include an audit of the non-power functions of the Central Valley Project and will attempt to do likewise on the other projects. In fiscal year 1986 the Inspector General will initiate audits of major projects that do not have a power system. We expect to fully comply with the audit directive with audits of major Reclamation projects completed by the end of 1987.

Question (b): Does the budget contain adequate funds to comply with this directive? If not, what steps have you or will you take to carry out the required audits?

Answer: Adequate funds are available this fiscal year to finance audits of the non-power functions of the Central Valley Project and the Pick-Sloan Missouri Basin Program. The fiscal year 1986 budget includes funds for an audit of the non-power functions of the Colorado River Storage Project and participating projects. We expect to include funds for audits of the remaining projects we will be required to finance in the fiscal year 1987 budget.

197. Question: The fiscal year 1985 energy and water appropriations bill also contained language prohibiting the Department from making studies "relating or leading to the possibility of changing" from at-cost to market rate or other non-cost based pricing of hydroelectric power provided through the federal power marketing agencies." During his confirmation hearings last summer, Assistant Secretary Broadbent said this language "represents an extraordinary limitation on the Department's discretion" and vowed, if confirmed, "to recommend to the Secretary that the Department oppose the language involved." Do you support this language? If not, what steps will you take to secure its repeal?

Answer: The discussion preceding Mr. Broadbent's answer dealt with the "ultimate development" concept as it applies to the Pick-Sloan project. To the extent that the legislation prevents us from studying the ultimate development concept or any other barrier to full cost recovery to the government I oppose it. I do not believe that it is in the best interests of the American taxpayer to prohibit, or to appear to prohibit, the study of cost recovery methods at the Reclamation projects. To clear up the controversy surrounding the extent of the prohibitions contained in the amendment, I will recommend that this legislation not be a part of future appropriation acts.

198. Question: Page 108-108A of the Bureau of Reclamation's budget justification (part one) states that the Department has computed the value of subsidies provided by the Federal government to project beneficiaries in the construction program. Would you please provide the committe with these calculation, both in the aggregate and on a project by project basis? Please also provide the assumptions used in making the calculations.

Answer: The Bureau of Reclamation has conducted a study of the subsidies which are provided in its Rehabilitation and Betterment Program in accordance with the instructions provided by the Office of Management and Budget (OMB) in Circular A-70. The assumptions and results of the study are shown in the accompanying attachment.

198. (Continued)

## OMB Circular A-70 Implementation

## The Rehabilitation and Betterment Act Loan Program

The Rehabilitation and Betterment (R&B) Loan Program, as authorized by the Act of October 7, 1949 (63 Stat. 724), and amended on March 3, 1950, (64 Stat. 11), and on October 3, 1975 (89 Stat. 485) is administered by the Secretary of the Interior through the Bureau of Reclamation. Its purpose is to facilitate the rehabilitation and betterment of irrigation systems on projects governed by Federal Reclamation Law and projects constructed under the authority of the Small Reclamation Projects Act (Act of August 6, 1956, 70 Stat. 1044, and Acts amendatory thereof and supplementary thereto). Federal funds are made available for the repair, replacement, or improvement of irrigation structures and systems which have deteriorated or become obsolete to the extent that the cost of the work is more than can be funded by the reserves and annual revenues of the water user entity, except as a long-term obligation.

The water user entity is required to repay the total cost of the R&B work over the shortest possible repayment period, generally not to exceed 40 years, at a rate based upon its ability and willingness to pay. The payment of interest is not required except for interest-bearing functions of projects constructed under the authority of the Small Reclamation Projects Act.

In calculating the subsidy pursuant to Attachment A of Circular A-70, the benchmark financial instrument selected was the yield rates on Federal Land Bank notes and bonds. The justification for this benchmark instrument is:

(1) Federal Land Bank loans are made to farmers for any agricultural purpose or other purposes. R&B loans are made to organizations representing farmers for capital improvements to systems primarily supporting agricultural enterprise.

(2) Federal Land Bank loans are made for periods of 5 to 40 years. R&B loans normally range from 7 to 40 years.

(3) Federal Land Bank bonds and notes are not guaranteed by the Federal Government. Thus, there is no distortion of the yield rates due to an implicit Federal subsidy. Federal Land Bank financial instruments are exempt from Federal, State, and local taxation. However, as most R&B loan contractors are public organizations, they would generally be eligible to issue tax-exempt financial instruments if they had the economic capacity to do so.

(4) Federal Land Bank yield rates are readily available in published financial sources (e.g., the Wall Street Journal).

As of November 1, 1984, published yield rates for Federal Land Bank instruments were for maturities of 1 to 13 years. For subsidy calculations under A-70, the yield rate for the instrument with the closest maturity to the financial life* of the loan will be selected. If the financial life of the loan is greater than the longest maturity date published for Federal Land Bank financial instruments, the Bureau of Reclamation will use the longest maturity bond for A-70 evaluative purposes. The Bureau will not attempt to extrapolate the yield curve beyond the longest maturity instrument.

The assumptions and parameters that we will utilize in evaluating R&B loans under A-70 are as follows:

(1) R&B loans are repaid at zero interest. Thus, the IRR would be zero and the subsidy would be evaluated at the Federal Land Bank rate.

(2) Evaluation of the loan will begin at the anticipated point where loan funds will be initially disbursed to the lender and carry through to the final loan payment.

(3) Disbursement of loan funds will be assumed to take place on an annual basis, and repayment on an annual basis (depending on contractual arrangements). This may be refined later to account for dispersal or repayment cash flow streams shorter than one year.

(4) Pursuant to Public Law 92-149 (Act of October 29, 1971; 85 Stat. 416), the costs incurred by the Federal Government in studying a potential R&B proposal are nonreimbursable. Also, if the potential loan recipient finances the study costs, those costs can be returned to the entity once the loan repayment contract is executed, and those funds are nonreimbursable. These funds will be treated in the subsidy calculation as a nonreimbursable disbursement in the first year when loan funds are disbursed.

(5) R&B loans made for the purposes of rehabilitation and betterment of Small Reclamation Projects Act facilities will be evaluated under this criteria, except for portions of the loan which are interest-bearing and will require the use of an alternative benchmark financial instrument.

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*The financial life of the loan refers to the time from the first transfer of funds to a recipient through the last loan payment.

The R&B Act, as amended, requires interest to be paid on those loan funds expended on interest-bearing, reimbursable functions on Small Reclamation Projects. The interest rate formula in the Small Reclamation Projects Act of 1956, as amended, is established each fiscal year. The legislative interest rate formula in the Small Reclamation Projects Act appears in conflict with the requirement in Section 10.a.(2) for quarterly adjustments in repayment interest rates. The R&B Act does not need amendment *per se* since it simply requires the usage of interest rates under the Small Reclamation Projects Act loan program. The Bureau of Reclamation has recently proposed that the interest rate formula in the Small Reclamation Projects Act be amended, and reference should be made to the companion statement on that loan program for a discussion of that proposal.

The following is the subsidy calculation for R&B loans included in the FY 1986 program. We presently do not have sufficient information to generate a subsidy calculation for the proposed loan with Ochoco Irrigation District, Washington.

| Loan Contractor | Project | Loan | NPV (Subsidy) |
|---|---|---|---|
| Okanogan I.D. | Okanogan | 9,958,000 | - 7,272,100 |
| Roosevelt W.C.D. | Salt River | 7,424,424 | - 4,926,753 |
| Heart Mountain I.D. | Shoshone | 5,500,000 | - 3,091,764 |
| Strawberry Valley W.U.A. | Strawberry Valley | 7,372,000 | - 4,622,843 |
| Fort Shaw I.D. | Sun River | 1,353,000 | - 891,657 |
| Uncompahgre Valley W.U.A. | Uncompahgre | 5,688,000 | - 3,049,372 |
| Grandview I.D. | Yakima | 1,054,000 | - 686,585 |
| Yakima-Tieton I.D. | Yakima | 62,133,000 | -39,065,830 |

199. Question: On June 25, Solicitor Richardson, replying to questions I put to him during his confirmation hearings, said he "will promptly review" the October, 1979 Associate Solicitor's opinion upholding the application of the 3.342 percent interest rate to all features of the Central Arizona Project. Mr. Richardson said: "If confirmed, I will promptly review both this opinion and advice and provide my opinion on this authority.

Eight months and numerous verbal inquiries later, I have still not received this opinion. In view of your commitment at the budget hearing to make "timely responses" to inquiries from this committee, will you provide this legal opinion to me promptly? If not, will you provide me with an explanation for Mr. Richardson's failure to honor his commitment to this committee?

Answer: Mr. Richardson has informed me that he sent to you his opinion on CAP interest rate on February 22 and again on March 4 following my receipt of this question from you. A copy of the correspondence follows:

United States Department of the Interior

OFFICE OF THE SOLICITOR
WASHINGTON, D.C. 20240

March 4, 1985

Honorable Howard M. Metzenbaum
United States Senate
Washington, D. C. 20510

Dear Senator Metzenbaum:

I note that you have requested of the Secretary of the Interior answer to my views on the interest rate charged for costs on various portions of the Central Arizona Project (CAP). I forwarded to you under date of February 22, 1985, a letter in delayed response to your request during my confirmation hearings.

I herewith enclose copy of my letter and analyses and attached earlier 1979 opinion of the Solicitor's Office.

Again, I regret the delay in getting this response to you.

Respectfully,

Frank K. Richardson
Solicitor

Enclosures

DER RF

United States Department of the Interior

OFFICE OF THE SOLICITOR
WASHINGTON, D.C. 20240

FEB 22 1985

LBR-ER-0305

Honorable Howard Metzenbaum
United States Senate
Washington, D.C. 20510

Dear Senator Metzenbaum:

This letter is offered in response to your question during my confirmation hearings concerning the interest rate for the Central Arizona Project (CAP). You requested that I review the Department's position on the CAP repayment interest rate, which is presently 3.342% for all features of the project. I regret that my response has not been more prompt, and apologize for the delay.

The legal position of the Department is based on the analysis of the Associate Solicitor, Energy and Resources, in a memorandum opinion dated October 11, 1979 to the Assistant Solicitor, Audit and Inspection. There had been differences of opinion within the Department about the correct interest rate/rates for the Central Arizona Project. Specifically, the Assistant Solicitor, Audit and Inspection expressed the belief that each separate feature of the project should be assigned a new interest rate based on the date the initial construction advance was made. The Assistant Solicitor based his opinion on section 403(h) of the Colorado River Basin Project Act, 43 U.S.C. § 1501 et seq., which calls for an interest rate for "each unit of the project."

The Associate Solicitor's October 11, 1979 memorandum reviewed the authorizing legislation and its legislative history. "Units" in the original bill were intended to be the various projects proposed which together would comprise the Colorado River Basin Project. The Central Arizona Project was clearly one of these "units." Later, certain "controversial" units of the Project were deleted from the bill, leaving the CAP as the only major part of the Project to be authorized. Section 403(h), the interest rate provision, was not rewritten to reflect the fact that units were deleted. It consequently reads ambiguously. The Associate Solicitor concluded, however that the word "unit" in section 403(h) refers to the entire Central Arizona Project, and that the single project interest rate is proper.

I have reviewed the memorandum and various other sources and I agree with the Associate Solicitor's conclusion. Its supporting research was thorough and the reasoning is sound. I hope this is sufficiently responsive to your inquiry. Please contact me if you require further information.

Respectfully,

Frank K. Richardson

Frank K. Richardson
Solicitor

cc: Docket
Secretary RF(2)
Solicitor RF
DER RF
DER Water RF
DER Water Branch File
DER Barringer
DER Bort
DER Chaffin
DER Mauro
DER Whitlock
DER Fisher

SOL/DER/SBarringer:ep Ext. 9391 2/22/85

DER Mauro

OCT 11 1979

Memorandum

To: Assistant Solicitor, Audit and Inspection

From: Associate Solicitor, Energy and Resources

Subject: Interest Rate Charges for the Central Arizona Project

You have recently questioned whether higher interest rate charges should be made on various portions of the Central Arizona Project. Your concern is with section 403(h) of the Colorado River Basin Project Act, 43 U.S.C. § 1501 *et seq.*, which states:

> The interest rate applicable to those portions of the reimbursable costs of *each unit of the project* which are properly allocated to commercial power development and municipal and industrial water supply shall be determined by the Secretary of the Treasury, as of the beginning of the fiscal year in which the first advance is made for initial construction of such *unit*, on the basis of the computed average interest rate payable by the Treasury upon its outstanding marketable public obligations which are neither due nor callable for redemption for 15 years from the date of issue.

43 U.S.C. § 1543(h) (emphases added).

The issue is the proper definition of a "unit of the project" which is to be the subject of an individual interest rate determination. You interpret "unit" to refer to the ten project features listed in section 301 (a) of the act, 43 U.S.C. 1521(a), and "project" to refer to the Central Arizona Project. (The features listed in section 301(a) are called "principal works" in the Act, and consist of such facilities as the Granite Reef Aqueduct, Orme Dam and Reservoir, and other dams and aqueducts.) The Bureau's position is that "unit" refers to the Central Arizona Project and "project" refers to the Colorado River Basin Project. Our conclusion is that the legislative history on the whole supports the Bureau's position.

We note at the outset that general reclamation law and practice do not appear to have established a consistent and uniform usage and meaning for the term "unit." It is apparently not a term of art and the legislative history of the statutes involved will usually be determinative of its meaning in a given case.[1]

There is little illuminating legislative history which concerns the interest rate provision itself. Section 403(h) was taken from the House bill, and the House Report states:

> The interest rate required by this section will be based on the average rate payable by the Treasury on outstanding 15-year or longer obligations; i.e, the coupon rate rather than the yield rate. This is the formula used by Congress in most water resource projects authorized in recent years.

House Report, supra at 80.

The Senate bill, S. 1004, had contained a different interest rate provision, which made the Central Arizona Project a single unit for interest rate repayment purposes:

> The interest rate applicable to those portions of the reimbursable costs of the Central Arizona Project ... shall be determined by the Secretary of the Treasury, as of the beginning of the fiscal year in which the first advance is made for initiating construction of such project....

S. 1004, 90th Cong., 2d Sess. § 5(g) (1967). The Senate report does not clarify this provision except to add: "The formula prescribed is consistent with that set forth in section 301(b) of the Water Supply Act of 1958 (72 Stat. 297) [43 U.S.C. 390b(b)] and frequently used for Federal water development projects." S. Rep. 90-408, 90th Cong., 1st Sess. 56 (1967). This reference to the Water Supply Act appears to address only the issue of the interest rate formula used, an interpretation which is supported by reference to a previous change made in the related Colorado River Basin Storage Act, 43 U.S.C. 620d(f), to accord with the interest rate provision of the Water Supply Act of 1958. P.L. 86-529 § 9 (1960). The change in the interest rate of the Storage Act dealt only with changing the interest rate from a yield basis to a coupon rate basis; neither the legislative history of that statute nor of the Water Supply Act shows any consideration of the separate question of the appropriate unit on which to charge the uniform interest rate. In the absence of other indicators of legislative intent, we assume this was the issue to which the Senate referred in its Colorado River Basin Project Act committee report.

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[1] See Appendix A for a general review of this issue.

The provision of the Senate bill was not adopted in the final act, *see* *Conference Report*, H.R. Rep. 90-1861, 90th Cong., 2nd Sess. at 25 (1968), and so is of limited use in interpreting that act. Normally, unenacted legislative provisions are not followed as an indicator of legislative intent. *See Gulf Oil Co. v. Copp Paving Co.*, 419 U.S. 186, 200 (1974). However, this rule arguably may not apply in this case because the Conference Committee adopted the language of the House bill throughout the act as a general policy, *Conference Report* at 19, 25, and did not focus attention on the interest rate provision in particular. Indeed, only minor differences in language existed in the House and Senate versions of the Development Fund (Title IV) which contains the interest rate provision, and the Senate Committee Chairman in discussing the Senate bill, S. 1004, stated it provided "for a development fund in language which is practically the same as other bills introduced in both the House and Senate." 112 Cong. Rec. S. 10407 (daily ed. July 26, 1967) (Sen. Hayden). Also pertinent is that this Department's statement to the House on the administration's bill, which had an interest rate provision similar to the Senate bill, seemed to treat the interest rate provisions of both the House and Senate bills as analagous:

> Section 5 (Sec. 403(j) of H.R. 3300) is the usual provision establishing the interest rates applicable to reimbursable costs allocable to commercial power and municipal and industrial water. It is standard.

House Hearings before the House Subcommittee on Irrigation and Reclamation on H.R. 3300 at 67 (March 13-17, 1967). Therefore, if one concludes that Congress understood the House and Senate provisions to be similar, it is reasonable to assume that the specific reference to the Central Arizona Project in the Senate bill would dictate that "unit" was intended to refer to the same project in the House bill.

The legislative intent of the meaning of "unit" appears clearer when we examine other related provisions of the Act, and in particular Title III, "Authorized Units; Protection of Existing Uses." You seem to interpret "Authorized Units" to refer to the ten listed projects in Section 301(a), and "Protection of Existing Uses" to refer to the provisions in section 301(b). The Bureau argues that a more logical reading of this Title, which is compatible with regular reclamation practice, is that the authorized units in fact refer to two units authorized by this title, the Central Arizona Project in section 301(a) and the Dixie project in section 307 (uncodified). Of these two interpretations, the Bureau position is more accurate, as closer examination of the legislative history shows.

The correct interpretation of the term "unit" is most readily apparent in examining the original bill, H.R. 3300, which was introduced in the House early in the 90th Congress, and was later enacted as the Colorado River Basin Project Act. The interest rate provision of this bill, Sec. 403(h), is the same as in the final Act, but Title III is considerably different. Title III is still labelled "Authorized Units; Protection of Existing Uses," but contains authorization for a controversial unit which would have dammed the mainstream of the Colorado River and indundated portions of the Grand Canyon. Authorization for a second such unit, the Marble Canyon Unit, was contained in Title III of H.R. 4671, 89th Cong., 2d Sess. (1966), the similar predecessor bill to H.R. 3300 which was reported in the previous Congress. See H. R. Rep. 89-1849, 89th Cong., 2d Sess. 1-11 (1966). These units were dropped in the House bill as finally reported, and were never present in the Senate bill. Title III of H.R. 3300, as introduced in the 90th Congress, read:

> Sec. 301. The Secretary shall construct, operate, and maintain the lower basin units of the Colorado River Basin project (herein referred to as the "project"), described in Section 302, 303, 304, 305, and 306.
>
> Sec. 302. The mainstream reservoir divisions shall consist of the Hualapai (formerly known as Bridge Canyon) unit, ...
>
> Sec. 303. [Provides for construction and operation of the Hualapai Unit.]
>
> Sec. 304. (a). The Central Arizona unit shall consist of the following principal works: (1) ... Granite Reef Aqueduct ... (2) Orme Dam and Reservoir ... (10) appurtenant works.
>
> Sec. 305 [providing for protection of existing uses validated by the Supreme Court's decree in Arizona v. California, 376 U.S. 340].
>
> Sec. 306. The mainstream salvage unit shall include programs for water salvage along and adjacent to the mainstream of the Colorado River and for ground water recovery.

H.R. 3300, 90th Cong., 1st Sess. House Hearings, supra, at 1-10 (Jan. 1967) (as introduced) (emphases added). The Dixie project and the Southern Nevada project were included in section 309 of the bill as units, but were not identified as units in section 301.

This legislative history, which indicates several more units were at one point included within the Colorado River Basin Project Act, also makes clearer another section of the Act, section 401. That section commences: "Upon completion of each lower basin unit in the project herein or hereafter authorized, or separate feature thereof...." Although that section is now somewhat ambiguous, as the Central Arizona Project is the only lower basin project given extensive consideration in the Act, it makes more sense when placed in the context of H.R. 3300 as introduced, when that project was only one of two major projects authorized in the bill.

This legislative history indicates that the term "unit" in Title III and section 401 of the Colorado River Basin Project Act was originally intended to refer to the Central Arizona Project as a separate "unit" of a single project which contained several other units. These sections were changed to their present form, probably for reasons of style only, after all major units of the Colorado River Basin Project were dropped except the Central Arizona Project. The interest rate provision was not modified, and so kept its reference to "units of the project," and thus now reads somewhat ambiguously. We are, however, persuaded by this legislative history that the term "unit" in the present interest rate provision at 43 U.S.C. 1543(h) refers to the Central Arizona Project, and possibly also to the water salvage program, 43 U.S.C. 1543, and that the term "project" refers to the Colorado River Basin project.

We realize that this interpretation is not the most desirable from a fiscal point of view. However, we think it is legally correct and will so advise the Bureau of Reclamation unless you wish to call the matter to the attention of the Solicitor in which case we would appreciate being notified as soon as possible.

cc: Docket
DER RF
DER Water RF
DER Goschy
DER Hacskaylo
✓ DER Mauro
RSwift

RSwift:ep 10/2/79

## Appendix A

## The Meaning of "Unit" in General Reclamation Law

The general reclamation laws, 43 U.S.C. 371-618p, are a backdrop against which section 403(h) of the Colorado River Basin Project Act should be interpreted. Both the Senate and House reports indicate Congress understood section 403(h) to conform to general reclamation practice, at least as to the formula, and section 604 of the Act, 43 U.S.C. 1554, requires the application of general federal reclamation law "except as otherwise provided in this Act." Consideration of reclamation law indicates, however, that Congress has generally merely accepted the Bureau's characterization of appropriate units, and has not adopted a consistent practice.

The term "unit" has several different meanings in general reclamation law. These definitions are made in the Reclamation Project Act of 1939 43 U.S.C. 485-485h, as amended:

> The term "project" shall mean any reclamation or irrigation project, including incidental features thereof, authorized by the Federal reclamation laws, or constructed by the United States pursuant to said laws, or in connection with which there is a repayment contract executed by the United States, pursuant to said laws, or any project constructed or operated and maintained by the Secretary through the Bureau of Reclamation for the reclamation of arid lands or other purposes.
>
> The term "division of a project" shall mean any part of a project designated as a division by order of the Secretary or any phase or feature of project operations given a separate designation as a division by order of the Secretary for the purposes of orderly and efficient administration.
>
> The term "project contract unit" shall mean a project or any substantial area of a project which is covered or is proposed to be covered by a repayment contract. On any project where two or more repayment contracts in part cover the same area and in part different areas, the area covered by each such repayment contract shall be a separate project contract unit. On any project where there are either two or more repayment contracts on a single project contract unit or two or more project contract units, the repayment contracts

> or project contract units may be merged by agreements in form satisfactory to the Secretary.
>
> The term "development unit" shall mean a part of a project which, for purposes of orderly engineering or reclamation development, is designated on a development unit by order of the Secretary.

43 U.S.C. 485a(c), (f), (h), (i).

These definitions shed no light on what has been the usual practice in setting interest rate charges for reclamation projects. The provisions on administration of irrigation projects, 43 U.S.C. 485h(d) (repayment contracts), (e) (water supply contracts), 485h-1 (administration), do not cover the interest rate practices which govern repayment contracts made pursuant to 485h(d). Therefore, interest rate provisions in contemporary reclamation projects must be examined to determine general practice.

The closest analogy is to the Colorado River Basin Storage Act of 1956, 43 U.S.C. 620-620o (Storage Act), which authorized reclamation projects in the Upper Colorado River Basin. Since Congress amended this act in passing the Colorado River Basin Project Act (Project Act), Title V, it may be assumed to have been aware of its provisions. The interest rate provision is similar to that of the Project Act:

> The interest rate applicable to each unit of the storage project and each participating project ... shall be determined by the Secretary of the Treasury, as of the beginning of the fiscal year in which construction is initiated, on the basis of [the interest rate of 15 year public obligations].

43 U.S.C. 620d(f). The fiscal effect of this provision is quite different from the Project Act, however, for section 1 of the Storage Act authorized four initial units and initially authorized eleven participating projects at a total cost of $760 million, less than that of the single Central Arizona Project. Nine more participating projects have since been added to the section, which now reads:

> [T]he Secretary of the Interior is authorized (1) to construct, operate, and maintain the following initial units of the Colorado River storage project, consisting of dams, reservoirs, powerplants, transmission facilities and appurtenant works: Curecanti, Flaming Gorge, Navajo (dam and reservoir only), and Glen Canyon ... and (2) to construct, operate, and maintain the following additional reclamation

> projects (including power-generating and transmission facilities related thereto), hereinafter referred to as participating projects: Central Utah (initial phase and the Uintah unit), San Juan-Chama (initial stage), Emery County, Florida, Hammond, LaBarge, Lyman, Navajo Indian, Paonia (including the Minnesota unit, a dam and reservoir on Muddy Creek just above its confluence with the North Fork of the Gunnison River, and other necessary works), Animas-LaPlata, Dolores, Dallas Creek, West Divide, San Miguel, Seedskadee, Savery-Pot Hook, Bostwick Park, Fruitland Mesa, Silt and Smith Fork.

43 U.S.C. 620. Three of the four project units cost $34, 83, and 421 million each and the participating projects were generally smaller, half costing under $10 million, and others ranging from $20 to $231 million (the Central Utah project). See H.R. Rep. 1087, 84th Cong., 2d Sess. (1956).

The interest rate provision of this act indicates that the units subject to a uniform interest rate may consist of large, multiple work groups, which supports the position that the Central Arizona Project is a unit. A general administrative practice is not apparent from the Storage Act, however, as the participating projects, which are also charged a uniform interest rate, are not of uniform size, cost or complexity. Some of the participating projects are authorized only for an initial stage, and others appear to be comprised of several units, but the interest rate in either case applies to the authorized extent of the "participating project." No Congressional intent is evident as to why different project sizes and types were each to have an individual interest rate.

Other reclamation projects also appear to lack a coherent pattern. In some, the units to which a uniform interest rate applies correspond to an individual work, or even a stage thereof. For example, the Arbuckle Project, Oklahoma, 43 U.S.C. 616k-s, and the Hoxman Project, Oklahoma, id. 615 aa-hh, consist of only one principal work, but are authorized to be constructed in units or stages at the Secretary's discretion, id. 616o, 615ee. See also id. 616l(h); 616bb(b) (contracts may be made for multiple units of these projects). On the other hand, some projects such as the Washita River Basin Project, Oklahoma, id. 615-615e, have an interest rate fixed at the date of enactment of the authorization act. See id. 615a(b).

200. Question: Given the current budget deficits, the extensive agricultural development in the Bureau of Reclamation states and the huge surpluses of major commodities, would you please provide me a rationale for maintaining the interest-free repayment policy for irrigators?

Answer: The Reclamation program is a long-term resource development program to meet the expanding food and fiber needs of this country and the world. Most USDA commodity programs are designed to offset short-term fluctuations in the markets and the weather. Irrigation adds stability to the production pattern, reduces risk, and provides products that would otherwise be in very short supply. Agricultural products are also exported in large quantities, which helps to reduce the unfavorable balance of payments.

Generally, Reclamation water users do not produce crops in large quantities which are in surplus supply. A recent study completed as a requirement of the RRA (Reclamation Reform Act of 1982) shows that 3 percent of the total U.S. value of wheat production, 1.3 percent of the corn, 18 percent of the upland cotton, and 11.8 percent of the of the rice are grown on lands irrigated by Reclamation projects. This study was conducted by the U.S. Department of Agriculture with some assistance from Reclamation.

In many cases, the commodity program crops are incidental in the crop production pattern on Reclamation projects. They are grown as part of a crop rotation or are grown to meet local livestock production requirements. Growing and feeding of these crops makes it possible to maintain a viable livestock industry throughout many areas of the Western United States.

The nearly $100 billion in crop production from Reclamation projects since 1902 far exceeds the approximately $7 billion invested by the Federal Government in irrigation facilities. There are many other tangible and intangible benefits associated with the program not directly related to agriculture.

The significant contributions to the total economy noted here would seem to justify the continuance of the established repayment policy on Reclamation projects.

201. Question: Do you believe it is consistent federal policy to build projects that deliver subsidized, below-market water to grow surplus crops? Does the department have any formal policy for insuring that its water development policy are consistent with the administration's overall agricultural policies? In evaluating proposed projects, do you have a formal system for evaluating the impact of projects on agricultural programs and crop surpluses?

Answer: As noted in the previous question, Reclamation projects support the production of only modest amounts of surplus crops. While there are large quantities of commodity program crops grown on irrigated land, much of this land was privately developed, particularly in Nebraska, Kansas, and the Texas high plains. Reclamation projects are often providing supplemental water as well, which means that a certain level of production would be occurring on that land even if there were no Reclamation project.

In answer to the second part of this question, the projects authorized in the last 20 to 30 years have carried a provision in the legislation which prohibited the growing of surplus crops for 10 years from the date of authorization. In the broader sense, policies for the two agencies serve two different purposes: Reclamation's need to meet long-term food and fiber needs, USDA's need to protect short-term farm income stability. There is an admitted dilemma which concerns maintaining the desired level of long-term agricultural capacity versus short-term policies to protect farmers from low prices and incomes associated with excess supplies.

In evaluating projects, the prices used are normalized for 5 years and reflect the market forces existing over the period of time. The study performed by USDA evaluated a variety of policy changes and rejected many of them as being too costly for the benefits received. We are in contact with USDA on a rather frequent basis relative to these matters and may be able to develop a more coordinated policy in the near future.

202. Question: The BLM is considering regulatory changes that would waive interim royalties and rents to the Government on certain "future interest" oil and gas leases. Would you explain what changes you are considering, the reason for the changes and their estimated budgetary impact?

Answer: I am informed that the proposed rule being considered by BLM would eliminate the supplemental agreement now required for future interest leases. Because this is a complex issue, I am reserving comment until I have had an opportunity to be fully briefed and carefully deliberate its implications.

203. Question: In view of your recent regulations with respect to Section 3 of the Mineral Leasing Act, do you intend to propose legislation on this subject? If so, please outline your proposal.

Answer: The Department issued Draft Guidelines (proposed in the Federal Register on February 15, 1985) to implement existing regulations in 43 CFR 3472. These regulations reflect Section 2(a)(2)(A) of the Mineral Leasing Act, as amended by Section 3 of the Federal Coal Leasing Amendments Act. At this time the Department does not intend to propose legislation. However, we are consulting with the staffs of the authorizing Committees on this issue.

204. Question: I am concerned with BLM's Recreation Management budget. This area includes four critical programs; wilderness, critical resources, areas of critical environmental concern, and recreation resources. The public lands are an important recreation resource to all Americans. I believe Sen. Clinton Anderson of New Mexico was instrumental in ensuring that our public lands were adequately protected for this purpose. It seems that current levels of funding have not been adequate to meet the Bureau's statutory obligations in these programs.

It appears that cultural resources are not being sufficiently protected. I point to the recent theft of one of the largest petrified logs in the Bisti Wilderness Area and a standing fossilized tree from the recently designated Fossil Forest area of my state. What steps are currently being taken to improve protection of these important areas? Do you feel the proposed budget is sufficient to the task?

Answer: We are aware of the recent theft and vandalism problems that have occurred, specifically in the Bisti Wilderness Area and Fossil Forest, and, generally, in the San Juan Basin. Since the passage of the "San Juan Basin Wilderness Protection Act of 1984," BLM has stepped up its patrol and surveillance activities in these areas in an effort to curtail vandalism. Other management initiatives include: 1) the drafting of regulations for the management of the Fossil Forest Area in response to Section 103(a) of the "Act," (2) work on the formal withdrawal of the Fossil Forest Area from mineral entry, and (3) planning for the preparation of a long-range management study for the area.

In general, BLM devotes a substantial portion of its cultural resource budget to the management and protection of the most exceptional sites. In addition to patrol and surveillance, this work includes monitoring of specific site conditions, public affairs work, law enforcement activities, and the development of an active volunteer program. BLM has informed me that the existing funding levels adequately cover critical management areas and that the Bureau is meeting its high priority protection objectives.

205. Question: In the area of recreation resources, the Bureau is responsible for the management of 13 National Wild and Scenic Rivers, 22 National Trails, 3 Conservation Areas and countless miles of hiking trails. Has the Bureau implemented management plans for these areas? Does the proposed budget allow adequate resources for this purpose?

Answer: I am informed that specific recreation management plans have been completed for 10 wild and scenic rivers. Most of the National Trails do not have completed recreation management plans; however, some are in process. Recreation management plans have been prepared for the California Desert, King Range and Steese National Conservation Areas and the White Mountains National Recreation Area. The latter two plans were recently completed. According to the Bureau of Land Management, the FY 1986 budget request is adequate.

206. Question: I understand the Preliminary Annual Workplan documents of the Bureau document program shortfalls identified by the agency and that the Final Workplan documents document any corrective measure. I think an analysis of these documents would help ensure the members of the Committee, at least myself, that the proposed budget will provide adequate protection and management of programs under the Recreation Management budget.

Answer: I understand that the development of an Annual Work Plan is the management process used by the Bureau of Land Management to allocate the budget resources appropriated by the Congress among the Bureau's operating entities. The process of developing the Annual Work Plan for FY 1986 will not be initiated until later this year.

207. Mr. Secretary, in the section of your testimony entitled "Grants and Shared Receipts for State and Local Governments," you propose that the Federal Government's costs of managing and administering mineral leasing programs be deducted from royalty revenues and that the States' shares (50%) be computed based on the resulting net amount. At present, State shares are computed based on gross revenues, after the deduction of windfall profit taxes. You are asking States such as New Mexico to take a significant reduction in these receipts.

I question whether this is in fact equitable.

Question: Is it not true that the States have assisted the Minerals Management Service over the past year in improving the administrative operation of the program? Has this not been a valuable contribution that has assisted the Federal Government in the management of the program?

Answer: I am informed by MMS that since FY 1982, several States have worked cooperatively with MMS to ensure that all royalties due from Federal leases are collected. As an example of this and as a result of the Linowes Commission recommendations, an Advisory Committee on Mineral Accountability was established in FY 1983 as a vehicle to improve the operation of Federal royalty management through consultations with States, Indians, and industry.

As a result of the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA), the Secretary can enter into cooperative audit ageeements with interested States whereby the participating parties can receive matching Federal funds. During FY 1984, seven States participated in the MMS Royalty Management cooperative audit effort in which the States and MMS worked side by side. In addition, the Secretary can delegate authority for audit responsibilities to the States. The States can, under delegated audit authority, receive 100 percent funding from the Federal Government for their audit efforts. As a result of the delegated audits, MMS auditors are released so that they can be applied to auditing offshore and Indian leases. The Department is negotiating with seven states to provide authority to perform delegated audits under Section 205 of FOGRMA. In addition, the State of Wyoming has recently signed an agreement with the Department to conduct audits under this Section. Since some of the largest mineral receipts are associated with offshore leases, this is a clear benefit to the Federal Government.

Moreover, MMS has initiated a series of Intergovernmental Personnel Act Agreements (IPA's) in which State representatives participate in the operations of all aspects of the Royalty Management Program (MMS finances this activity). This opportunity enables these State Government employees to better understand and contribute to the integrity of the State royalty revenue distributions. In addition, MMS through its Royalty Management Program has an ongoing series of quarterly meetings with States and Indians, to identify areas of improvement that can be achieved in administering the Federal Royalty Management Program.

With respect to all of these cooperative efforts, there have been mutual benefits derived by both the States and MMS as each group has discussed problems and needs.

208. Question: If you feel the administrative costs are too high, have you considered asking the states if they want to administer the program?

Answer: According to the Minerals Management Service, the States have sought and are being delegated responsibility to conduct audits under Section 205 of the Federal Oil and Gas Royalty Management Act (FOGRMA). While this represents only a relatively small portion of the entire Onshore Minerals program, it does indicate the States' desire and ability to get involved with the administration of this important program. While this Department has not asked States to administer this program, it is a consideration which we may want to explore more fully. There are obviously many details and questions which would have to be addressed before such an approach could be attempted.

209. Question: Mr. Secretary, I notice in your testimony you make reference to the fact that the Department is prepared, "within existing resources and in close cooperation with the States, to develop a water management strategy in the national interest." Could you please tell the Committee how you plan to develop that strategy and what the components of such a strategy might be. Will this take the form of a national water policy? Will the Department concern itself with the controversial issue of water rights?

Answer: We plan to build on our base of expertise in the U.S. Geological Survey, Bureau of Reclamation and Bureau of Indian Affairs to continue a dialogue with State, local and regional groups on various water policy issues, including quality, development, utilization and conservation. Addressing these issues would constitute the major components of a water management strategy. Achievement of a consensus among major water interests and all levels of Government on a set of goals and objectives regarding water resources on a regional basis is a fundamental step in developing a water management strategy. If we are able to achieve such a consensus, it is our intention that any subsequent development of a water management strategy or a national water policy would not supplant relevant State and regional responsibilities. We believe strongly in the primacy of State water rights and with regard to Indian tribes we are pursuing resolutions through negotiations rather than litigation.

210. Question: Why hasn't the Department of the Interior responded to the Federal Energy Regulatory Commission's request for comments concerning the application by Farmington, NM to construct a hydro-electric facility at Navajo Dam in northwestern New Mexico? It is my understanding the FERC has been waiting for the DOI comments since January of last year. Please respond as soon as possible.

Answer: The Department sent a response to FERC on December 31, 1984. That response recommended that a license not be issued at this time, pending the completion of the Safety Evaluation of Existing Dams (SEED) program study and the study being conducted on the changes in flow regime below the dam and the impacts on fish and wildlife. These issues have been reassessed and Federal Power Act, Section 4(e) conditions have been developed and will be sent to FERC shortly. The Department will also advise FERC that with the 4(e) conditions, it has no objection to a license being issued.

We regret the length of time it took to respond to FERC. However, the agencies of the Department were notified on January 20, 1984 and asked to review the application for major license filed by the City of Farmington (City). The response was due back to FERC by March 13, 1984. In the meantime, the Navajo Tribe of Indians (Tribe) intervened. In May 1984, the city recognizing that the Tribe had concerns about its being awarded the license to develop the power potential, hired Harold Ranguist, Payne & Ranguist, Albuquerque attorney, to explore the possibilities for a compromise between the City and the Tribe. The possibilities are still being negotiated by these parties.

On October 29, 1984 the FERC sent a reminder notice with a 30-day response deadline to the Bureau of Reclamation Upper Colorado Regional Office. We formerly reminded FERC that such letters must be sent either to the Department or to Reclamation's Washington Office for a timely response. FERC agreed and extended the Department response deadline to January 7, 1985. We met that deadline and this matter is currently in the process of being resolved.

211. Question: This budget proposes a three-year moratorium on land acquisition. What is the present backlog of land acquisition in the National Park Service? Will the moratorium result in deterioration of the resources which the National Park Service is directed to protect? Will this result in significantly higher expenditures once the moratorium on acquisition is lifted?

Answer: The present backlog of land acquisition is estimated at $507 million based on authorized appropriation levels. Backlog based on rough estimates to acquire authorized areas without regard to authorized appropriation levels is estimated to be $672 million. (See table provided in answer to question from Senator McClure, question #7.) It is not expected that the moratorium will result in significant deterioration of the resources that the National Park Service is directed to protect. The $5 million requested for land acquisition in FY 1986, and balances available from prior years, will be used to acquire threatened tracts, to help avert deterioration. We anticipate no more than nominal increases in land acquisition costs during the 3-year period of the proposed moratorium.

212. Question: Under the current grazing fee formula, the FY 1982 grazing fee was $1.86 per animal unit month (AUM). The fee was reduced by $.46 per AUM in FY 1983; by $.03 in FY 1984; and by $.02 in FY 1985 to its current level of $1.35 per AUM. Do you believe that these fees should be increased?

Answer: A recommendation on whether to increase grazing fees should be based on the results of the study of grazing fees and public comments on the study. We feel that it is inappropriate to take a position prior to the evaluation of the public comments.

213. Question: According to the recent appraisal study, what should be the current market value for grazing?

Answer: There are many factors that need to be weighed in making that decision, not just the appraisal. This is only one of many considerations that the Administration and the Congress will need to evaluate in its deliberations.

Question: What other factors will you consider in recommending a new grazing fee?

Answer: The grazing fee study considers six factors in evaluating grazing fee options. These are: (1) equity to the U.S. Government which considers the level of receipts and the costs of the program administration; (2) permittee impacts or the costs to the permittee of fee alternatives; (3) equity among livestock producers; (4) the administrative feasibility of fee alternatives; (5) the consideration of nonfederal government and community interests; and (6) multiple use considerations. Other evaluation factors may be developed in the public comment period.

214. Question: Why is the Department proposing to delete the provision enacted by Congress last year regarding the illegal subleasing of grazing permits?

Answer: The Bureau of Land Management advises me that its proposed regulations will make that provision unnecessary. This is a technically complicated matter. As we have regulations pending public review and comment, I plan to wait until I have had an opportunity to gain greater understanding of this issue, including public input before I comment. I will say, however, that the Department will seek an efficient means to rid the system of any abuses without creating unnecessary side effects and inequities for those people playing by the rules of the game.

Question: Have any grazing permits been cancelled as a result of this language?

Answer: No. A proposed action to reduce or cancel a grazing permit for unauthorized use is currently in progress in Arizona. We understand that this case also involves possible illegal subleasing. However, the case is still in process, and all of the facts have not been determined.

# PROPOSED FISCAL YEAR 1986 BUDGET REQUEST

## (Forest Service, FERC, and Synthetic Fuels Corporation)

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FRIDAY, MARCH 1, 1985

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
*Washington, DC.*

The committee met, pursuant to notice, at 9:08 a.m., in room SD-366, Dirksen Office Building, Hon. James A. McClure (chairman) presiding.

Present: Senators McClure, Wallop, Warner, Evans, Bingaman, and Rockefeller.

Also present: Frank M. Cushing, staff director; Gary G. Ellsworth, chief counsel; Richard D. Grundy, senior professional staff member; Tony Bevinetto, professional staff member; D. Michael Harvey, chief counsel for the minority; Thomas B. Williams, professional staff member for the minority; Benjamin S. Cooper, professional staff member for the minority; and Elizabeth Moler, counsel for the minority.

### OPENING STATEMENT OF HON. JAMES A. McCLURE, A U.S. SENATOR FROM THE STATE OF IDAHO

The CHAIRMAN. The committee will come to order.

Today the Committee on Energy and Natural Resources convenes its second day of hearings on the President's fiscal year 1986 budget for programs of the Forest Service, the Federal Energy Regulatory Commission, and the Synthetic Fuels Corporation. On Monday we will conclude with testimony from Secretary of Energy John Herrington.

Our initial witnesses today are Douglas MacCleery, the Deputy Assistant Secretary for Natural Resources and Environment at the Department of Agriculture, and Max Peterson, the Chief of the Forest Service.

The budget realities of the eighties have had their effect on the Forest Service. Fluctuations in the economy affected housing starts; timber prices varied to say the least. Companies in this sector of the economy went under or pared down to survive.

In my home State of Idaho several communities that are dependent upon Federal timber production felt the pinch and bind. We're climbing back, but we have to look carefully at the budget choices in front of us as we set the policy in the Congress for the future of our national forests.

I am just as committed as the administration is to bringing the Federal budget under control. And I sincerely hope that we will have the full support of the administration in fulfilling our responsibilities to the American people. We are faced with difficult choices which affect the daily lives and livelihoods of current and future Americans.

Businesses, jobs, and the lives of Americans are interwoven in the management of our national forests. Besides recreational uses, a multiplicity of goods and services are dependent on effective management of this national asset.

For 1981, the requested budget for the Forest Service was $2.1 billion, and for 1982 it was $2.3 billion. By comparison, your requested fiscal year 1986 budget is $1,823 million, a reduction of $284 million, or 13.5 percent, below fiscal year 1985 appropriations.

We all have different ideas on which programs of the Department should be emphasized. But rather than continue to devote our attention to areas of the budget which we have been squeezing for 4 years, we just reexamine our position on the nondiscretionary portions of the budget.

Before we can proceed with the administration's latest round of cuts in the Forest Service budget, we must fully understand their implications for long-term management of the National Forest System.

And not because I think it's necessarily the appropriate place to do it, but because obviously there is a buildup of propaganda effort with respect to the so-called deficit timber sales, the so-called below-cost timber sales, in which there is either a misunderstanding on the part of some or a deliberate attempt to misinform some, I think it might be well for us at this time to put in the record a couple of studies that bear upon that issue so that at least those who desire to know the facts will have some access to the facts and not simply be misled by all the noise.

One is a study by the Forest Service itself on the question of whether road construction has accelerated, and that paper will be made a part of the record at this point.

[The information follows:]

December 7, 1984

Congressional Staff:

The Forest Service's road building program as it relates to the timber sale program has been the subject of recent media stories. We enclose background material on this issue.

For further information you may contact:

Tom Thompson on 447-9345 of the Legislative Affairs Staff or
Dave Spores on 447-4051 of the Timber Management Staff

USDA, Forest Service
Legislative Affairs Staff

Enclosure

11/5/84

# ROAD CONSTRUCTION HAS NOT ACCELERATED ON NATIONAL FORESTS

## The Issue

A recent flurry of media stories has painted a picture of greatly increased road building activities in the National Forest System (NFS), administered by the U.S. Department of Agriculture's Forest Service. These stories imply that such increased road contruction is a deliberate effort to "spoil" National Forest System roadless areas from further consideration as Wilderness. Furthermore, they charge, roads built primarily for timber harvesting hurt wildlife habitat and cost more to build than they return in timber receipts to the U.S. treasury.

Facts prove otherwise. There has been no rapid increase in road building in the National Forest System. In fact, there has been a decrease in both the miles and cost of road construction over the last four years. Moreover, future road building activities are being considered as part of each individual Forest management plan which is developed with public review and comment. It is, in fact, the regard for environmental concerns that adds to NFS road construction costs. Even so, the federal government receives in total more money from the sale of timber than it costs to sell it.

## Road Construction

Roads are planned, designed, and built in the National Forest System for multiple use purposes. The National Forest System includes 191 million acres nationwide in 155 National Forests and 19 National Grasslands. By law, the National Forests are managed for multiple uses. This means that the Forests produce a variety of renewable resources -- water, fish and wildlife habitat, outdoor recreation, timber, wilderness, and forage for livestock, to name the major ones. In the past year for example, the NFS produced 9.2 billion board feet of timber for homes, paper and all the other products made from wood; they provided 9 million animal-unit months of grazing for domestic livestock which produce red meat; they provided 229 million visitor days of recreation use, almost twice as much as that provided by any other agency; they provided homes for wildlife; and they provided water for many cities and rural areas.

So the primary purpose of road construction in the NFS is to provide access to the resources--whether that resource is an incredible mountain vista, a campground and picnic area, a wilderness, or wood to build homes. In order for taxpayers to use and enjoy the resources available on the National Forests, they must have appropriate access to them.

Just as important, roads are needed to protect the forest, from wildfires, for example, or from infestation of insects and diseases. Often a road built for one purpose, such as harvesting timber, is used to provide recreation access, to haul in water improvements for wildlife and domestic livestock, and to allow movement of firefighters and equipment in areas threatened by fire.

Roads are not built in areas designated or recommended for wilderness or wilderness study, or where management objectives are met by trails, by boat, by air or other types of access.

Thus roads are one form of access to serve multiple use purposes of the National Forest System. But because the first, major use of many roads is for timber harvesting, the majority of roads are financed through the use of purchaser credits. This means the timber purchaser builds roads to Forest Service specifications and deducts the costs of construction from the payments for the timber. Although financed by that first timber sale, these roads are used to provide access for other uses and for future timber sales in the area. Construction of roads other than by timber sales, as well as all planning, management and project engineering costs to support the purchaser credit roads, is financed by funds appropriated by Congress.

Road construction has not escalated rapidly in the past four years, as charged. In 1980, the total amount of road construction in the National Forest System was 10,500 miles. In 1984, the amount planned was 9,708 miles. About 55 percent of those amounts are for reconstruction, not new construction. The costs for the 1984 road construction program are estimated to be $513 million; the comparable costs in 1980 were $632 million, accounting for inflation. Thus both mileage and real costs have decreased since 1980, not increased.

## Future Plans

Planning for future National Forest management is done through both the development of the Forest and Rangelands Renewable Resources Planning (RPA) process and development of land and resource management plans for each of the National Forests. The RPA process assesses the Nation's future needs for forest and rangeland resources -- fish and wildlife habitat, timber, recreation, wilderness, water, range and minerals -- and then develops a program for Forest Service resources and activities to help meet those needs. The program is first developed as a series of alternative actions and distributed for public review. After public comment is reviewed and considered, a final program is developed and sent to Congress. This program guides future activities. It is updated every five years.

At present the Forest Service is developing the 1985 RPA program. As part of this program the road construction mileage for the next 50 years is being analyzed. In the year 1990, for example, the range of miles for roading projects is 7,700 - 13,700 miles. As with the figures for existing mileage, about 55 percent would be reconstruction and 45 percent new construction. No RPA decisions have yet been made on actual miles of road to be built in the next 10 years. Decisions to provide access to specific areas on the National Forests will be done through the development of individudal forest plans.
Integrated land and resource management plans are being developed for each national forest unit and are targeted for completion by 1986. These plans, accompanied by an Environmental Impact Statement, detail where the resources are and how they will be managed. As with the RPA, Forest Plans are first issued in a draft format and present several alternatives for review. After a public comment period, a final plan and EIS are developed. These plans spell out, for example, such things as where new recreation development is planned, wildlife habitat management areas, or tree harvesting areas. The plans also identify future access needs to support these management objectives.

Both the RPA program and the Forest plans are developed openly in the full scrutiny of the public eye and with the assistance of interested publics. There are no surprises, no hidden agendas or secret plans for building roads in the National Forests. As with all management activities, all road building is planned for and documented.

Environmental Quality Concerns

Specific projects, such as timber sales, road construction, wildlife habitat improvement, and others, are identified by the Forest Supervisor to implement the Forest Plan. Many of these projects involve road construction which is planned with due regard for the environment. Each plan has a set of requirements designed to protect resources such soil, water, air, wildlife, fish, etc. If such activities as road construction or timber harvesting might adversely affect wildlife habitat, measures to mitigate those effects would also be planned. For example, if needed roads were to be built, the plan might also call for their closure during elk calving periods to reduce their impact. In another example, roads planned near streams would be built at standards appropriate to prevent soil runoff which could spoil salmon spawning areas. In some areas special logging systems are used to decrease the number of roads needed.

Below Cost Timber Sales

Does the Forest Service, as charged, spend more to construct roads for timber sales than the government receives from the sales? The answer is no. The value of timber sold from the National Forests exceeds timber sale costs. It is true that market conditions vary from year to year and that the years 1982 and 1983 were two of the worst years for the forest products industry in almost 40 years. For instance, the timber harvested from the National Forests in 1982 was about 40 percent below the normal harvest level. Nonetheless, from 1978 to 1983, the costs of the timber sale program, including roads, amounted to a total of $2.9 billion. During the same period, the value of timber harvested was $4.3 billion and the value of timber sold was $8.4 billion.

It is not generally expected that initial capital investments to build transportation facilities such as highways, railroads or airports will be recovered from the first few years of use of the facility. Yet the costs of the roads built in the National Forest System are expected by some to be offset by the value of the immediate sale for which the roads initially serve. But those roads exist after the sale is completed and remain as an investment in the future. The first timber sales in an area may not have enough volume to recover the expensive cost of building the roads. However, those same roads will provide access to later sales in the area. If costs for building the roads were parceled out over the total volume of timber to be hauled on them, the "monetary profitability" of the initial sale would be dramatically improved. In addition, the roads are available to protect the forest from fire, and they also provide access to recreation, wildlife, grazing and other uses of the forest. If road costs were apportioned to these other resource uses, apparent timber sale profitability would improve even more.

## Roadbuilding in Unroaded Areas

One of the charges being levied against the Forest Service is that it is rushing full speed ahead to build roads in presently unroaded areas to keep those areas from being considered for wilderness. One critic called it a "road-building binge." Again, the facts belie the charge.

What are National Forest roadless areas? In the context generally used, the term refers to those areas inventoried in studies started in 1971 which eventually became known as RARE II (Roadless Area Review and Evaluation). The purpose of RARE II was to accelerate the process of reviewing all the remaining roadless areas in the National Forest System, a total of 62 million acres or about one-third of the System, and make recommendations as to which should be preserved as designated wilderness and which should be released for other uses. RARE II depended heavily on the public involvement process. More than 264,000 comments were received from over 360,000 respondents.

In 1979, after completing an analysis of all public comments, the Forest Service made recommendations on a total of 62 million acres inventoried. It recommended that 15.5 million acres be designated wilderness, an amount that would double the size of Wilderness in the National Forest System. The agency recommended that 36 million be available for uses other than wilderness. For the remaining 10.5 million acres, it was determined that not enough information existed to make a recommendation. These areas were to be considered later as part of the National Forest planning process. Both the areas recommended for wilderness and those recommended for further planning were to be managed to protect their wilderness qualities. Areas recommended for non-wilderness uses, however, were to be available for a full range of multiple resource uses.

In June 1979, the President tranmitted the wilderness recommendations to Congress. In the 96th, 97th, and 98th Congresses, legislation was enacted which, in total, designated an additional 16.8 million acres of wilderness in the National Forest System. Because legal questions developed regarding the sufficiency of the RARE II Environmental Statement, the Congress in state by state legislation has in statute released over 27 million acres of roadless areas for uses other than wilderness.

It is in this category of roadless areas recommended or released for non-wilderness use that critics are focusing attention on roading. There is no roading underway or planned for roadless areas which were originally recommended for wilderness (unless Congress has put them in the "released" category) nor for those originally categorized for "further planning" until Forest plans are completed.

Thus after one of the most extensive public involvement efforts ever undertaken by a government agency, after six years of congressional deliberation and legislative action, the Forest Service planned management activities are proceeding on those areas released for non-wilderness multiple uses.

There are over 32 million acres of designated wilderness in the National Forest System, over 17 percent of the entire System. These areas are protected by law to the fullest extent possible to ensure that they retain their wilderness characteristics for this and future generations of Americans to enjoy. The Forest Service has not and will not build roads in such areas. But in return, those national forest system areas which are not wilderness must be available to provide their fair share of products and benefits upon which the public has come to depend, thereby relieving already heavily impacted roaded areas from additional pressure for resource use.

## Conclusion

The 191 million acres of National Forest System are managed for multiple use purposes to provide the American public with numerous natural resource benefits. In order for the public to receive these multiple use benefits, roads must be built in many areas to provide access to and protection for the forest resources.

Over 17 percent of the National Forest System, over 32 million acres, is presently designated Wilderness. An additional 12 million acres are presently being managed to protect the existing wilderness characteristics pending either wilderness study, further planning, or Congressional action. The remaining National Forest acreage must be planned and managed in an orderly way to serve the full range of resource needs of the American public.

The Forest Service has not rapidly accelerated roadbuilding activities in the past four years; in fact, the mileage of roads constructed has actually decreased from 10,500 miles built in 1980 to the 9,708 miles planned for 1984. In 1984 constant dollars, the money spent decreased from $632 million in 1980 to $513 million in 1984.

There is no "secret agenda" to increase road building in the National Forest System. Overall road access needs to support management activities are analyzed in the RPA and incorporated in individual Forest land and resource management plans. Development of both the RPA and the Forest plans includes a public review and comment process. Possible environmental effects of proposed activities, such as road building, are analyzed and, if needed, mitigation measures are planned.

It does not cost more to harvest timber in the National Forests than the government receives from the sale program. Over the past six years, receipts from timber harvested have exceeded the costs of the timber sale program by $1.4 billion.

In short, National Forest road construction is planned with involvement from the public, is environmentally sound, and is necessary to the use and enjoyment of the National Forest System.

## QUESTIONS AND ANSWERS

Q. Why is there any need for roads in the National Forest System?

A. Congress has mandated that the National Forests be used for multiple uses. Roads are needed in many areas to provide access to the variety of products and services available from the National Forests and also to protect the Forests from fire, insects and diseases.

Q. How is National Forest road construction financed?

A. Road construction is primarily financed in two ways. Most roads are built by timber purchasers. The costs of constructing the roads are deducted from the purchase price of the timber. Other roads are built with funds appropriated by Congress.

Q. Has there been a rapid increase in road building activities on the National Forests in the last four years?

A. No, not at all. In 1980, 10,500 miles of road were constructed; in 1984, planned construction is 9,708 miles. The costs for building roads in 1980, when adjusted to 1984 constant dollars, were $632 million; the costs in 1984 were $513 million.

Q. Has there been a large increase in the number of engineers working for the Forest Service in the last four years?

A. No, actually there has been a slight decline in the number of engineers. In 1980, the Forest Service employed 1,350 engineers; in 1984, the number is 1,310. They work on many activities other than roads.

Q. How much future road construction is planned ?

A. As part of the RPA program, the Forest Service is analyzing road construction miles for the next 50 years. In 1990, for example, the range of miles being analyzed is 7,700 - 13,700. Of this, 45 percent would be new construction and 55 percent, reconstruction. However, it should be emphasized that no actual decisions have been made on actual miles and location of road to be built in that time period. Actual decisions to access areas will be made through the development of the Forest Land and Resource Management Plans.

Q. Does the Forest Service ever temporarily close any National Forest roads?

A. Yes. The decision to close a road is made following an analysis considering resource effects, management considerations, public safety, and public opinion. Many of the decisions to close a road are made during the resource planning process which occurs before the road is constructed or reconstructed. Some roads are also closed on a seasonal or short-term basis for such reasons as protection of wildlife during migration, mating or rearing periods, fire prevention and public safety during periods of high fire danger, and protection of road investments during bad weather. Since 1983, approximately 50,000 miles of road have been closed at any one time for those reasons.

Q. Has the Forest Service shifted funds appropriated for wildlife and recreation programs to construct roads instead?

A. No. The Forest Service does not have the authority to use funds appropriated by Congress for one purpose, such as recreation or wildlife, for another purpose such as road construction. Such reprogramming of funds is outside the Agency's authority. A public report is made annually which identifies what has been accomplished with the various funds appropriated by Congress. It is true that throughout the National Forest System, some campgrounds have been closed. But this is due to inflation and reduced appropriations, rather than a reprogramming of funds.

Q. Does NFS road construction adversely impact wildlife habitat?

A. The agency takes great care to avoid or minimize the impact on wildlife. Road access is considered as part of the total Forest plan which integrates all resources uses. If a necessary road might adversely impact a wildlife program, measures to mitigate concerns would be planned at the same time.

Q. What is the Forest Service doing to keep road construction costs down?

A. The Forest Service has taken steps in the past few years to reduce road costs. This has been accomplished through reductions in road standards, improved planning and analysis of access needs and designs to meet these needs, and increased management emphasis to ensure proper use of the existing road system.

Q. Why is there a perceived acceleration of road building activities in the Northern Region (Montana and northern Idaho)?

A. We don't know, because it is a false perception. Actual road construction in that Region has decreased from 808 miles of new construction in 1980 to 675 miles in 1984. It is true that if the Northern Region is to meet resource objectives called for by the RPA and Forest Plans, it will need to increase access. The RPA calls for a gradual increase in road construction in the Region. Obviously some of this mileage would be in presently unroaded areas. However, no roading or other development has occurred in any area administratively recommended for wilderness, or any Congressionally mandated wilderness study area, unless that area is specifically released for other uses by the Congress. Likewise, until further planning is completed, or until Congress releases areas from that requirement, no development has been done that would change the wilderness character of areas recommended for further planning by RARE II.

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The CHAIRMAN. And a very excellent report from the Congressional Research Service of the Library of Congress by Ross W. Gorte on benefit and cost considerations in national forest timber sales. That, too, will be made part of the record at this point, not because they are the last word, or the definitive decision, but because they shed light upon what is a matter of growing concern to more Americans as we see that topic getting more and more news and more and more coverage.

[The information follows:]

Congressional Research Service
The Library of Congress

Washington, D.C. 20540

# BENEFIT AND COST CONSIDERATIONS IN NATIONAL FOREST TIMBER SALES

Ross W. Gorte
Analyst in Natural Resources Policy
Environment and Natural Resources Policy Division
December 17, 1984

## BENEFIT AND COST CONSIDERATIONS IN NATIONAL FOREST TIMBER SALES

The relationship between the costs and revenues associated with U.S. Forest Service timber sales is rapidly becoming a significant issue in national forest management. Several recent reports have shown that the Government costs involved in selling timber often exceed the revenues derived from some sales. 1/ This issue is a concern for national forest management and planning because the high and rising Federal debt is causing increased attention to the costs and benefits of all Federal programs. In the FY85 appropriations for the Forest Service, the House Appropriations Committee directed a reduction in timber sales on national forests where the sale costs exceeded the revenues in three of the past five years; this directive was removed during the House floor debate at the request of the House Agriculture Committee chairman in order to allow his committee the opportunity to examine this issue. However, a $400,000 appropriation for a timber cost-accounting system was retained, and then enacted in the continuing resolution.

Congress has directed the Forest Service to include economic analysis in the planning and management of the national forests through the Forest and Rangelands Renewable Resources Planning Act of 1974, as amended by the National

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1/ See, for example:

U.S. Controller General. Report to the Congress: Congress Needs Better Information on Forest Service's Below-Cost Timber Sales. GAO/RCED-84-96. Washington, U.S. General Accounting Office, June 28, 1984. 46 p.

V. Alavic Sample. Below-Cost Sales on the National Forests. Issue Brief. Wash., The Wilderness Society, July 1984. 24 p.

Forest Management Act (NFMA) of 1976. 2/ At present, the most explicit congressional guidance in law on timber sale economics is Section 6(k) of NFMA; this section is commonly known as the timberland suitability or marginal lands provision. This provision prohibits timber harvesting, except for salvage operations and for sales to protect multiple-use values, on lands identified as not suited for timber production, "considering physical, economic, and other pertinent factors to the extent feasible, as determined by the Secretary [cf Agriculture]."

There is considerable debate over the intent and requirements of this provision. Forest Service critics assert that "considering economic factors" was intended to require a comparison of Government revenues with Government costs, and that timber should not be sold from lands where the costs exceed the revenues. Others argue that such an interpretation is unnecesarily and inappropriately restrictive. Another point of debate is the specificity of the analysis: Should each timber sale be examined or is the national forest the proper level of analysis? This paper identifies how benefits and costs can be used to explored the economics of timber sales and to help determine which lands are not suited for timber production in the national forest planning process.

## RECEIPTS AND BENEFITS

Benefits of the timber sale program have historically been measured by Federal receipts (or expected receipts) from the sale of timber. However, Government receipts are not the only result of the timber sale program. Timber harvesting changes the site, to the benefit of some resource users although to the detriment (the cost) of others. The road construction which often

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2/ Act of August 17, 1974; Public Law 93-378, 88 Stat. 476 and Act of October 22, 1976; Public Law 94-588, 90 Stat. 2949, respectively.

accompanies timber harvesting is also beneficial to some resource users and harmful to others. Receipts and benefits can generally be disaggregated into four categories: direct Government receipts, indirect receipts, direct benefits and indirect benefits.

## DIRECT GOVERNMENT RECEIPTS

The Federal Government receives cash for the timber it sells, generally reported as "value of timber sold." These values usually include deposits made by timber purchasers for site work to be performed later by the Forest Service. Occasionally, depending on the specific source, value of timber sold includes the estimated construction costs of roads built by timber purchasers; generally, however, timber purchasers are allowed to deduct the estimated construction costs from the cash payments for the timber. 3/

Government cash receipts from timber sales may not equal the reported "value of timber sold." The value sold is the expected revenue when the contract is signed. However, the Government does not receive payments until the timber is cut; many timber sale contracts have cutting deadlines several years in the future, primarily to allow purchasers the time to build the required roads. Thus, actual receipts may not occur until several years after the estimated receipts are recorded, and it is highly unlikely that the estimated receipts (value of timber sold) would exactly equal the actual receipts (value of timber cut) in any one year.

Actual receipts from each timber sale may also differ from the expected receipts. Timber sale contracts are awarded to the bidder with the highest

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3/ A thorough discussion of the intricacies of effective and ineffective timber purchaser road credits is beyond the scope of, and unnecessary for, this overview discussion.

weighted average stumpage bid rate, based on the estimated volume for each timber species. 4/ However, payments are determined by the measured volume of each species harvested on the sale. If the actual volume differs from the estimated volume, payments will differ from the estimated receipts. Another factor accounts for some of the differences between expected and actual receipts: the Forest Service adjusts stumpage bid rates according to changes in product markets, a process known as stumpage rate adjustment. 5/ When markets are strong and prices are rising, actual receipts can exceed expected receipts; however, with the weak markets and low prices of the past 5 years, actual receipts are likely to be below the estimated receipts. No studies have compared actual and expected receipts by sale to determine if there is a significant difference over time.

Another factor in using receipts (expected or actual) for examining timber sale economics is that some regulations and procedures affect the stumpage bids. For example, elements of Forest Service timber sale design, such as clearcut sizes and shapes, may be less efficient for harvesting than would occur on private lands, and may be inefficient for protecting multiple-use values. Factors such as these are undoubtedly reflected in the stumpage bids, but the magnitude of the potential Federal revenue loss from possible hidden inefficiencies is unknown.

## INDIRECT RECEIPTS

The timber sale program indirectly generates Federal revenue in at least two ways. One is through the taxes paid by the timber purchasers and their

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4/ Stumpage is the term used for standing timber which is bought and sold.

5/ There are limits to the adjustments which can be made, based on the original bid value and the minimum acceptable stumpage rates.

employees. In areas dependent on Federal timber supplies, reducing the Federal timber sale program may reduce the local forest products industry tax base. However, the impact of changes in the sale program on the total tax base (forest products industry, recreation industry, etc.) is the relevant consideration in timber sale economics.

The current timber sale program can also affect future Federal timber receipts. For example, some harvests are intended to replace the existing low quality stand with a new, young, vigorous stand. Other harvests are commercial thinning operations, designed to improve the quality and growth of the remaining trees as well as produce some revenue. Either case may be economically desirable if the present value of the future receipts (net of costs) exceeds the "loss" on the present harvest.

## DIRECT BENEFITS

Timber harvesting does not just provide wood; it changes the existing site. One change is the improved access to the area provided by the roads built for removing the timber. Some of these roads will be included in the permanent road network, and thus used for fire control access and by recreationists long after the timber harvest has been completed. These benefits may not have been intentionally incorporated into the sale plan or in the road design, but they are nonetheless the result of the timber sale. Some of these benefits may flow to the Federal Government: improved fire control access may reduce suppression costs, for example. Many, however, are received by third parties, such as hunters and fishermen who make use of the improved access.

Another example of a direct timber sale program benefit is the control of insect and disease epidemics. Section 6(k) of NFMA specifically excludes salvage sales from the required economic considerations. However, many timber sales related to insect or disease control are not salvage sales; some sales are made to harvest infected trees that are not yet dead because of the higher stumpage prices for live trees. In addition, some timber sale plans are designed with the explicit goal of reducing the risk and the spread of insects or diseases. Such silvicultural controls may be inefficient from a purely timber revenue viewpoint, but may be efficient when alternative control costs are included.

### INDIRECT BENEFITS

Additional benefits can result from the Federal timber sale program. One is forest products industry employment. Employment is generally not the goal of Forest Service timber sales, but employment results from the sale and can be considered an indirect Government benefit through the taxes paid and in the general sense of supporting private employment and reducing unemployment benefits paid. Another example of an indirect benefit is through wildlife habitat management: timber sales create forest openings which may benefit those species of wildlife which use openings (note: similar negative impacts are indirect costs). Thus timber sales indirectly benefit those people who want more of these wildlife species.

## EXPENDITURES AND COSTS

There are numerous expenditures and costs associated with the timber sale program. Some of the expenditures are essential for selling timber, others are less directly related to timber sales. Some of the costs are not cash costs, while some costs fall to resource users rather than to the Government. As with receipts and benefits, expenditures and costs can generally be disaggregated into four categories: direct Government expenditures, indirect expenditures, direct costs, and indirect costs.

## DIRECT GOVERNMENT EXPENDITURES

The Federal Government must spend money in order to sell timber. At a minimum, expenditures include the costs to plan, prepare, and administer the timber sale contracts. However, many timber sales are modified during the planning and preparation to accommodate or enhance non-timber resources, such as wildlife, aesthetics, and water quality. Such costs are usually included in sale preparation or in resource support for timber sales in the Forest Service accounting system and in their reported costs. It is arguable whether these additional expenditures, particularly for enhancement, should be considered costs of the timber sale program.

In addition to the expenditures for preparing and administering timber sale contracts, the accounts for sale preparation and harvest administration in the Forest Service accounting system include expenditures for managing the "non-industrial" timber program, including activities such as firewood permits and Christmas tree cutting. In FY83, small timber sales (up to $300 per sale) and sales of non-convertible products (Christmas trees, pine cones, etc.) accounted for 98 percent of the number of sales made, but less than 1 percent of the receipts. 6/ The administrative costs of these non-industrial sales are likely unrelated to timber production economics addressed in Section 6(k) of NFMA.

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6/ U.S. Department of Agriculture, Forest Service. Report of the Forest Service--Fiscal Year 1983. Washington, U.S. Govt. Print. Off., 1984. p. 86.

Other Forest Service timber sale program costs which, arguably, are related to timber sales include timber investments, such as reforestation and timber stand improvement. 7/ Logically, these expenditures are associated with future revenues, and the economic analysis of them would compare the discounted future revenues with the costs. However, Section 6(g)(3)(E)(ii) of NFMA prohibits timber harvesting unless there is assurance of adequate reforestation within 5 years after the harvest. Thus, at least reforestation costs are linked to recent harvests. But if the reforestation expenditures are included in a timber sale economic analysis, then the present value of the resulting future revenues should also be included.

Another cost that is directly associated with timber harvesting is road planning, construction, and maintenance. In FY83, 91 percent of the appropriated road construction funds for the Forest Service were spent on roads needed to access timber, including planning and engineering for roads built by timber purchasers. 8/ However, as previously discussed under direct benefits, roads may be used for more than just timber harvesting. As with sale planning and preparation, it is arguable whether road expenditures which also accommodate other users should be considered costs of selling timber. Consistency in analyzing timber sale economics could be achieved either by including the non-timber benefits of road construction or by allocating the road expenditures among the uses that are benefitted (perhaps in proportion to the benefits received).

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7/ Knutson-Vandenberg (K-V) deposits made by timber purchasers should be treated differently than direct Government expenditures on reforestation and stand improvement because these deposits are generally included in receipt data.

8/ U.S. Congress. House. Committee on Appropriations. Subcommittee on Department of the Interior and Related Agencies. Department of the Interior and Related Agencies Appropriations for 1985. Hearings, 98th Congress, 2d Session. Part 2. Washington, U.S. Govt. Print. Off., 1984. p. 1396.

The fact that roads are long-term assets complicates the issue. Many roads are used for more than one timber sale, suggesting that the planning and construction expenditures should be distributed among the appropriate timber sales. However, this also requires that a portion of earlier road expenditures be attributed to sales using existing roads. A business could capitalize and depreciate long-term assets, such as roads, spreading the costs over the expected life of the asset. 9/ At present, Government accounting and funding systems do not lend themselves to capitalization and depreciation, since depreciation is a non-cash cost of operations.

## INDIRECT EXPENDITURES

A portion of general administration costs can, arguably, be associated with the timber sale program. The elimination of the timber sale program would probably reduce general administration, particularly in the Washington Office and in the regional offices. However, marginal changes in the timber program are unlikely to radically change general administration expenditures. In this respect, allocating general administration costs to timber sales before examining the economics of timber production could reduce the timber sales program without reducing general administration; that is, additional general administration costs might make some timber sales "money-losers" even though eliminating them will not save general administration costs.

Another expenditure arguably associated with the timber sale program is payments to counties. Under the Act of May 23, 1908 10/, the Forest Service

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9/ Internal Revenue Service (IRS) rules allow firms with regular road construction programs to write off their road investments as annual expenses. Within the forest products industry, some firms use this approach, some capitalize and depreciate their roads, while others use a mix of these approaches.

10/ Act of May 23, 1908; Ch. 192, 35 Stat. 251, as amended.

returns 25 percent of gross revenues (including deposits and the value of purchaser-built roads) to the counties where the national forests are located. These payments were originally intended as substitutes for the property taxes that a private landowner would pay if the lands were not in Federal ownership. As such, they do represent a cost of a business enterprise, although actual property taxes might be lower (or higher) than the 25 percent payments. An additional point is that the 25 percent payments are proportional to the magnitude of the timber sale revenues.

Forest Service 25 percent payments to counties offset payments under the Payments-In-Lieu-of Taxes (PILT) program, within limits. 11/ If Federal expenditures are being compared with Federal revenues overall, then Federal Federal payments to counties, not just Forest Service 25 percent payments, are the relevant measures; Forest Service payments will vary with the timber sale program on a given national forest, but the final cost to the Federal Government may not vary much.

## DIRECT COSTS

Government expenditures are not the only costs of timber harvesting. Losses or added costs for users of resources which are affected by timber harvesting are costs of the timber sale program. One example is the loss of wilderness recreation opportunities resulting from timber sales. This is a loss to certain resource users, perhaps represented in part by the added expense of traveling further for backcountry recreation.

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11/ For information on the operations of the PILT program, see: Advisory Commission on Intergovernmental Relations. The Adequacy of Federal Compensation to Local Governments for Tax Exempt Federal Lands. Washington, U.S. Govt. Print. Off., July 1978. Commission Report A-68.

At times, the direct costs may contradict the direct benefits. For example, improved access resulting from the timber sale program may increase stream sedimentation, harming fish populations and implying future restoration costs. However, improved access may also lead to increased fishing effort. Thus, fish populations could be reduced at the same time sport fishing is increasing. Whether this represents net benefits or net costs depends on the output considered important or relevant and on the perspective of the user.

## INDIRECT COSTS

There are additional indirect impacts from the timber sale program. For example, expenditures on timber sales, and more particularly expenditures to enhance resources which do not generate Federal receipts, may reduce the ability of the Federal Government to spend money on other programs, be they student loans, aid to Ethiopia, or the MX missile. Others, such as backpacking equipment manufacturers and suppliers, may be affected by the extent of the timber sale program. Another example is individuals who prefer wildlife that is dependent on virgin or overmature forests may be indirectly harmed to the extent that those wildlife species are harmed by timber harvesting.

## SUMMARY

The economics of the Forest Service timber sale program is rapidly becoming a significant issue in national forest planning and management. Forest Service critics argue that Section 6(k) of the National Forest Management Act virtually prohibits timber harvesting on lands where Federal revenues are below the sale costs. The opposing argument is that a revenue/cost test can be an unnecessarily restrictive interpretation of economic considerations.

The difficulties in accurately assessing the receipts, benefits, expenditures, and costs makes this issue exceptionally complex.

This paper has only addressed the issue of how timber sale benefits and costs can be measured. However, there are broader policy questions which should be also addressed. Should, or to what extent and under what conditions, timber be sold even if the revenues are below the costs (assuming both are measured by the "appropriate" yardsticks)? What information is needed to determine whether timber is being sold where revenues are below costs, and what kind of an accounting system is needed to provide that information? How responsive should the timber sale program be to changes in general economic conditions? Should the economics of each timber sale be examined, or should the focus be on similar timber stands or on entire national forests? In sum, what considerations should be included in determining the extent and location of the Forest Service timber sale program, and who should determine or influence the program?

The **Chairman**. Before proceeding with the witnesses, I will ask Senator Wallop if he has an opening statement.

Senator **Wallop**. No, Mr. Chairman, I don't. Thank you.

The **Chairman**. Senator Bingaman, do you have any remarks?

Senator **Bingaman**. I do not, Mr. Chairman.

The **Chairman**. Thank you very much. I appreciate both of your attendance here this morning so promptly.

Secretary MacCleery and Chief Peterson, I welcome you today. I know you want to look at these issues. Your prepared statements will be made a part of the record in full. You are invited to summarize or deliver the statement as you see fit.

## STATEMENT OF HON. DOUGLAS MacCLEERY, DEPUTY ASSISTANT SECRETARY FOR NATURAL RESOURCES AND ENVIRONMENT, DEPARTMENT OF AGRICULTURE

Mr. **MacCleery**. Thank you. I would like to summarize my statement, Mr. Chairman and members of the committee.

I welcome the opportunity to appear before you to discuss the fiscal year 1986 budget for the Forest Service. I am accompanied today by Max Peterson, Chief of the Forest Service. Also with us at the table is Lamar Beasley, Deputy Chief for Programs and Legislation in the Forest Service.

Before Chief Peterson discusses the highlights of the Forest Service budget I will briefly cover a number of policy issues which shape the Forest Service budget, and I will summarize my statement.

The issues that shape the budget, the overriding issues, were the need to reduce Federal expenditures, the Forest Service, Bureau of Land Management interchange program, the proposal to change payments to States to a net receipts basis, recreation user fees, the timber buy out legislation, implementation of that legislation, and the status of the 1985 RPA program.

In his State of the Union Address, the President emphasized the need to move toward a balanced budget by reducing Government spending, rather than by raising taxes. The administration is committed to reducing the role of Government in the economy as well as eliminating waste and improving Federal management practices.

To help achieve the goal of lower Federal expenditures, the 1986 budget for the Forest Service and for the Department of Agriculture is austere. The administration's budget and legislative proposals are intended to foster increased economic activity while reducing the cost of the present Federal program and the drain on the Federal budget.

The productivity of Forest Service programs will be improved by carefully controlling costs, adjusting management procedures, and paying more attention to benefit-cost relationships. The objective is to produce timber, recreation, and other products and services at the lowest unit costs.

Receipts generated from lands managed by the Forest Service are expected to be $1.5 billion under the current budget. This level of receipts reflects both improvement in the economy and efforts of this administration to bring the American people a higher financial return from the public lands.

The budget considers a legislative proposal to interchange administrative jurisdictions between the Forest Service and BLM of about 30 million acres. Tentatively about 19 million acres of BLM land will be transferred to the Forest Service and about 15 million acres of Forest Service lands to BLM. An important component of this interchange is a complete transfer of the O&C lands from BLM to the Forest Service. No changes are proposed in Alaska.

The interchange has three major objectives: to enhance public service; improve administrative efficiency; and reduce costs. At the end of a 10-year period, we estimate $200 to $300 million in savings will have resulted from the interchange.

A legislative proposal to transfer the involved lands and unify the underlying minerals management responsibilities under the agency that manages the surface will be submitted to Congress by this summer. Until legislative action occurs, both Forest Service lands and public lands will continue to be managed under current laws which apply to those lands.

The 1986 budget also proposes to change payments to States from a sharing of gross receipts to a sharing of net receipts. The Forest Service would deduct from receipts the program costs that are necessary to manage the lands that generate the receipts. Shares of receipts would be paid to State and county government and would be calculated after the costs are deducted.

In concept, this proposal is like profitsharing in the private sector. Two primary reasons underlie this proposal. Under current law, the Federal Government, after giving the States their share of gross receipts and after paying the costs, often realizes a loss. Sharing receipts on a gross basis, as is now done, rather than on a net basis, gives the States the incentive to seek at times land resource development or protection even though costs exceed receipts.

A legislative proposal covering additional user fees is currently being developed and will be submitted to Congress in the near future. This legislation will allow recreation users to share the costs associated with developing and operating recreation resource opportunities. A key element in this proposal is that the funds generated from the collection of fees will go back into the land for development and maintenance of those recreation resources.

The 1984 Timber Contract Modification Act provides purchasers of timber the opportunity to buy out some of their contracts. We have proposed rules for implementing this legislation and these rules have been released for public comment. In fact, the public comment period ended February 4. We are currently evaluating these responses for the purpose of implementing the rules by early March.

Based on current estimates, we estimate that about 10 million board feet will be turned back to the Forest Service. About 2.6 million board feet of this turnback will be updated and offered for resale as part of our 1986 budget.

As called for in the Forest and Range Land Renewable Resources Planning Act, we are updating the RPA every 5 years. The new 1985 RPA program is currently under review and we expect to publish it in final form in the next couple of months.

The principles embodied in the recommended program are to reduce cost, improve efficiency, and enhance revenues; maximize net returns and meet the environmental and legal requirements; maintain or improve, where economic, our forest and range land productivity; maintain or improve environmental quality; minimize short-term disruptions in community stability; expand user fees to offset costs; emphasize State and private funding for forestry work on nonindustrial private lands; and emphasize increased cost-effective management techniques from research.

This is a long-term program which will be presented to Congress in the near future.

This concludes my prepared remarks, and Chief Peterson will now discuss the details of the 1986 budget.

[The prepared statement of Mr. MacCleery follows:]

STATEMENT OF
DOUGLAS MacCLEERY
DEPUTY ASSISTANT SECRETARY
U.S. DEPARTMENT OF AGRICULTURE

Before The Senate Energy And Natural
Resources Committee

March 1, 1985

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I welcome the opportunity to appear before you today to discuss the FY 1986 budget for the Forest Service. I am accompanied by R. Max Peterson, Forest Service, Chief.

Before Chief Peterson discusses the highlights of the Forest Service budget, I think it is necessary to cover a number of policy issues: (1) the need to reduce Federal expenditures, including those of the Forest Service, (2) the Forest Service/Bureau of Land Management interchange program, (3) a proposal to change payments to States to a net receipts basis, (4) recreation user fees, (5) timber buy-out, and (6) the status of the 1985 RPA program.

## Reducing Federal Expenditures

In his State of the Union Address, the President emphasized the need to move towards a balanced budget by reducing government spending, rather than by raising taxes. He is committed to reducing the role of the government in the economy as well as eliminating waste and improving management practices.

To help achieve the goal of lower Federal expenditures, the 1986 budget for the Department of Agriculture is austere. The administration's budget and legislative proposals are intended to foster increased economic activity, while reducing the cost of the present Federal programs and the drain on the National budget.

The proposed budget authority in 1986 for management of Forest Service programs is $1.8 billion. This amount provides for a decrease in regular program levels in 1986 of $389 million. After adjusting for an increase of over $104 million in 1986, because of transfer of forestry activities of the Bureau of Land Management including Oregon and California Grant Land payments to counties to the Forest Service, the net decrease is almost $285 million. The decrease involves postponement of construction and recreational land acquisition, supplemented by reduced unit costs and increased efficiencies of Forest Service programs, a 4.8 percent reduction in timber offered for sale, termination of most financial assistance grants to States, deferred research work, and a change in sharing receipts with States.

The productivity of Forest Service programs will be improved by carefully controlling costs, adjusting management procedures, and paying close attention to benefit-cost relationships. The objective is to produce timber, recreation, and other products or services at the lowest unit costs. Careful attention will be given to both market and nonmarket values of resources, such as water quality, and their associated costs.

Receipts generated from lands managed by the Forest Service are expected to be about $1.5 billion. This level of receipts reflects both improvement in the economy and efforts of this administration to bring the American people a financial return from the public lands.

## Forest Service/Bureau of Land Management Interchange

About 63 percent of Federal lands in the lower 48 States are managed by BLM and FS. BLM has responsibility for 174 million acres and the FS has responsibility for 168 million acres. Both agencies have a similar mission to manage these lands under multiple-use and sustained-yield principles. In many cases, the land managed by the two agencies is intermingled or adjacent. This has, in some locations, resulted in unnecessary duplication in organization, facilities, and staffing in both agencies. There are 71 communities throughout the western States which have both FS and BLM offices.

The budget considers a legislative proposal to interchange administrative jurisdiction of about 30 million plus acres: tentatively about 19 million acres of BLM land will be transferred to the FS and about 15 million acres of FS land to BLM. An important component of this interchange is a complete transfer of the Oregon and California Grant Lands from BLM to the Forest Service. No changes are proposed in Alaska.

The interchange has three major objectives: (1) enhance public service; (2) improve administrative efficiency; and (3) reduce costs. At the end of a 10-year period, $200 to 300 million in savings will have resulted from the interchange.

A legislative proposal to transfer the involved lands and unify the underlying minerals management responsibilities under the Agency that manages the surface resources will be submitted to the Congress by this summer. Until legislative action occurs, both National Forest lands and public lands will continue to be managed under current laws that apply to those lands.

## Proposed Payments to States Legislation

The 1986 budget proposes to change payments to States from a sharing of gross receipts to a sharing of net receipts. The Forest Service would deduct from receipts the program costs which are necessary to manage the lands that generate the receipts. Shares of receipts to be paid to State or county governments would be calculated after costs are deducted.

In concept, this proposal is like profit sharing in the private sector. Two primary reasons underlie this proposal: (1) Under current law the Federal government, after giving States their share of the gross receipts and after paying the costs, often realizes a net loss; and (2) sharing receipts on a gross basis, as it is now done, rather than on a net-of-costs basis, gives States the incentive to seek land resource development or protection even though costs exceed total receipts.

## Recreation User Fees

A legislative proposal covering additional user fees is currently being developed and will be submitted to Congress in the near future. This legislation will allow the recreation users to share the costs associated with developing and operating recreation resource opportunities. Those who receive the benefits should pay for a reasonable portion of the costs.

## Timber Buy-Out

The 1984 Federal Timber Contract Modification Act provides purchasers of federal timber an opportunity to buy-out some of their contracts. The proposed rules for implementing the timber sale contract buy-out provisions have been released for public comment. The deadline for public comment was February 4. We are currently cataloging and documenting the formal responses and expect to publish the final rules for implementing the Act in early March.

Based on current conditions an estimated 10 billion board feet will be returned to the Forest Service. About 2.6 billion board feet of this turnback volume will be updated and offered for resale in FY 1986. Some of this volume, about 600 million board feet, will require little reworking. The rest, 2 billion board feet, will require moderate to total reworking.

## 1985 RPA Program

As called for in the Forest and Rangeland Renewable Resources Planning Act, the program is to be updated every 5 years. The new 1985 RPA Recommended Program is currently under review. It describes a course of action through 2030 for management and administration of the National Forest System, for Forest Service Research, and for assistance in the protection and management of State and private forest lands.

The principles embodied in the recommended program are to: reduce costs, improve efficiencies, and enhance revenues; maximize net benefits and meet environmental and legal requirements; maintain or improve, where economic, forest and range productivity; maintain or improve environmental quality; minimize short term disruptions in community stability; emphasize expanded user fees to offset costs; emphasize State and private funding for forestry work on nonindustrial private lands; and emphasize increased cost-effective management techniques from Research.

This long-range program will be presented to the Congress in the near future.

This concludes my opening remarks and Mr. Peterson will now discuss details of the FY 1986 budget.

The CHAIRMAN. Mr. Peterson.

## STATEMENT OF HON. R. MAX PETERSON, CHIEF, FOREST SERVICE, DEPARTMENT OF AGRICULTUE: ACCOMPANIED BY J. LAMAR BEASLEY, DEPUTY CHIEF FOR PROGRAMS AND LEGISLATION, FOREST SERVICE

Mr. PETERSON. Mr. Chairman, I know you are short on time. You have my statement, so I will just use one chart to overview the budget quickly. It also occurred to me that we presented rather complete testimony on the below-cost sales test question earlier this week before Chairman Whitney's committee on the House side.

We would be happy to make that testimony available for you.

The CHAIRMAN. If you would do so, we would be happy to make it a part of the hearing today.

Mr. PETERSON. We would be happy to provide it to you.

The CHAIRMAN. Thank you.

Mr. PETERSON. This chart gives you an overview of the Forest Service budget for 1986. As you can see, the regular appropriation is down $147 million. Let me give you a quick rundown of those pluses and minuses.

The major reductions are these. The research program is $121 million in 1985. It is proposed at $104.2 million in 1986, a reduction of $16.8 million.

The State and Private Forestry Program in 1985 is $58.3 million; the proposed funding for 1986 is $29.7 million, a reduction of $28.6 million. The budget proposes to phaseout the State grant programs, State cost-sharing on insect and disease control, and forest management and fire.

The other changes from 1985 to 1986 are minus $6.5 million in the national forest system; a reduction in construction of $53.7 million, primarily in roads, with a reduction from $230 million to $191 million in roads, reflecting both a decreased timber offering and also reflecting the fact that there are some roads already built related to the timber reoffered due to the turnback legislation.

It also reflects a continuing effort to reduce both the number of miles of road built and the cost. As you indicated earlier, we have reduced the miles and cost of roads constructed every year for the last 5 years. We have gone from over 10,000 miles in 1981, to 7,650 in 1984, and we anticipate being down again in 1985 and 1986.

We are also critically looking at new harvest systems, requiring less reconstruction of roads. We have closed a lot of roads. Many roads are being built with the idea that we won't keep them open, particularly in sensitive wildlife areas. They will be open for foot traffic, but they will not remain open for automobile traffic. They may be open periodically for gathering firewood, or opened on a periodic basis, but not fully open all the time. This type of program has been accepted quite well. It has been worked out carefully with the local people.

The reduction in land acquisition from $43.6 million to $2.3 million anticipates closing existing cases. It does not anticipate new cases. The other changes are rather minor.

You notice in the proposal there's $14 million for the Forest Service/BLM interchange, and $50 million for Oregon and California lands that has previously been in BLM's budget. These lands have been transferred, in total, to the Forest Service budget in this proposal.

The $14 million for the interchange, plus a little bit of money in BLM's budget, will be shared by the two agencies. It will be used for doing things like leasing joint offices in places where it would make good sense to have a joint office, whether or not the land transfer ever in fact happened. It does not anticipate taking any irrevocable action. There will not be any action taken that cannot be reversed.

We will not close any offices or take any other irrevocable action until Congress authorizes the interchange.

All we're doing between now and June is prepare the detailed implementation plans.

At that time the public will have full information on exactly what will happen. The legislation will be submitted. While you are considering the legislation, we'll merely double-hat some people, have them work both sides of the line. Still, we will not take irrevocable action, and I want to make sure that's understood by all concerned.

The other budget changes are in permanent appropriations, which reflect normal changes in working funds. The big change there is the one referred to by Mr. MacCleery. It is the change from 25 percent of gross receipts to net receipts for payments to States. That's the $67 million item.

The other changes are rather insignificant.

[The prepared statement of Mr. Peterson and the statements before Representative Whitley, follow:]

# STATEMENT OF R. MAX PETERSON, CHIEF
# UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE

Before The Senate Energy and Natural
Resources Committee

March 1, 1985

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I appreciate the opportunity to appear before you today to discuss the 1986 budget for the Forest Service. Before providing additional information on the budget proposals for 1986, I would like to review our recent accomplishments:

## Highlights of 1984 Accomplishments

The overall emphasis in Forest Service activities this past year was placed on reducing costs and improving efficiency while still providing quality service to the public.

We took steps to reduce administrative staffing and streamline the organizational structure. Productivity improvement teams were formed to find new ways for the Forest Service to cut costs and increase efficiency. Where feasible, offices were colocated or consolidated, and many administrative tasks were automated.

To improve productivity and reduce costs in other areas, I appointed Productivity Improvement Teams (PIT) to study fleet management, timber sale volume, collections, and wood residue. The Agency also evaluated progress in carrying out recommendations of eight previous PIT studies.

To further streamline operations, the Forest Service combined the support services for the Pacific Southwest Forest and Range Experiment Station in Berkeley with those of the Pacific Southwest Region in San Francisco. A reorganization of the engineering program is expected to reduce 64 FTEs by the end of 1986. Also, the Glide and Steamboat Ranger Districts on the Umpqua National Forest were combined as were the Dale and Ukiah Ranger Districts on the Umatilla National Forest.

As part of the Forest Service History Program, an organization of private citizens called Friends of the Grey Towers was established. The "Friends" will help raise funds needed to operate environmental programs at the Pennsylvania home of Gifford Pinchot, first Chief of the Forest Service.

Receipts from lands managed by the Forest Service were $1,030 million compared with $960 million in 1983, an increase of 7 percent.

Forest Research - Emphasis in 1984 was placed on such high priority research as biotechnology, atmospheric deposition, anadromous fish habitats, and analysis of the value of forestry research. A highlight of the year was the completion of the accelerated research phase of the joint Canada/United States spruce budworm program.

State and Private Forestry - Programs emphasized pest suppression, development of an efficient fire program in each State, and timber production on nonindustrial private forest land.

Major activities in 1984 were protecting about 798 million cubic feet of merchantable timber from pests, providing national leadership for the National Interagency Incident Management System for fire protection, completing the technology transfer plan for truss-framed structures, and providing assistance in the completion of five draft and five final State forest resources plans.

National Forest System

Grazing - In 1984, use increased slightly from 1983, but receipts were down about 6 percent from 1983 as a result of reduced fees.

Minerals - Over 27,300 mineral cases were processed. This program generated over $136 million in receipts, a 3 percent increase over 1983.

Recreation - Land administered by the Forest Service continues to account for about 41 percent of all recreation visitor-days use on Federal lands. In 1984, 240 million recreation visitor-days were recorded. This program generated over $27.5 million in receipts.

Timber - In 1984 a total of 10.7 billion board feet were sold. The value of timber sold was $699 million. This compares with 1983 sales of 11.1 billion board feet that sold for $774 million.

The average bid price for timber in 1984 was slightly under $66 per thousand board feet. This compares with $70 in 1983, $61 in 1982, and $154 in 1981.

The harvest of National Forest timber was at the highest level in this decade. This harvest reflected the general rebound of housing along with other segments of the economy. In spite of the high harvest level, the value of the timber harvested was below levels achieved earlier in the decade. The lack of price response to the relatively high demand and the difference between volume offered and sold reflect the excess mill capacity in some regions of the country, the price-dampening effects of the record levels of timber imports received from Canada, and the reluctance of some firms to operate high priced timber sales at a time of uncertainty about contract relief legislation.

About 10.5 billion board feet were harvested compared with 9.2 billion board feet in 1983, an increase of 14 percent. Receipts were about $791 million compared with $634 million in 1983, an increase of 25 percent.

We also met or exceeded funded targets for fuels management, reforestation and stand improvement, trail construction, range improvement, wildlife habitat improvement, and land line location. A detailed review of 1984 accomplishments is included in the Report of the Forest Service for fiscal year 1984 which you have or will be receiving very shortly.

## 1986 Budget

The $1.8 billion proposed for FY 1986 responds to the needs for economic recovery, the budget deficit, and increased efficiency. Overall, the regular Forest Service budget is about $389 million below the 1985 level. In addition to regular Forest Service programs, over $104 million has been added to the Forest Service budget for the Oregon and California Grant lands, including payments to counties and the interchange program with the Bureau of Land Management. This results in a net decrease of almost $285 million from 1985. Continued emphasis will be placed on improving the delivery of goods and services to the American public, while increasing productivity.

It is a basic principle that the productivity of the land will be protected in all Forest Service programs. We are also placing greater emphasis on the compatibility among resource uses such as timber, recreation, fish, wildlife, and grazing. We are dedicated to the principle that, as part of the planning and decision making process, there must be careful consideration of the environmental, economic, and social impacts of Forest Service resource management activities while increasing productivity and efficiency.

## Research

The Research 1986 budget of $104.2 million is about $16.8 million less than the 1985 current estimate. The 1986 proposed budget reflects a detailed review of all research programs, retaining those of highest priority. Review criteria included such things as the potential impact of the research, importance and timing of the research problems, and status of current research projects.

Reductions have been spread across most research areas with the largest being targeted to Inventory and Analysis ($4.2 million) and Competitive Grants ($7.8 million). Highest priority research will be maintained in:

- Timber management and genetics;
- Protection and management of the resources;
- Forest products and harvesting;
- Forest economics and forest inventory and analysis;
- Acid rain; and
- Old-growth wildlife habitat.

## State and Private Forestry

The State and Private Forestry 1986 budget of $29.7 million is about $28.6 million below the 1985 current estimate. All grants to States are eliminated except for a $3 million grant to Minnesota for the Boundary Waters Canoe Area. Financing for Forest Pest Suppression is provided only for Federal lands. Technical assistance for fire protection, pest management, and management and utilization will be provided. This budget will require States and local governments to set their own priorities and finance programs that are primarily of benefit to their local publics.

## National Forest System

### Forest Fire Protection

The 1986 budget for National Forest fire protection is $142.5 million, a $13.7 million reduction from the 1985 current estimate. The largest reduction in the program is in fuels management activities. These are discretionary investment projects, such as prescribed burning, to reduce or remove woody materials whose buildup increases the potential for wildfires. This and lesser reductions in other areas of the program could result in increased risk of losses depending on the severity of the fire season.

### Minerals

The budget for the minerals program is $28.6 million, a 8 percent increase above the 1985 appropriation. The increase recognizes the high rate of receipts generated by the program. Receipts are estimated at $155 million, 13 percent above the 1985 estimate. The funding increase will continue the development of oil and gas resources, strategic minerals, and geothermal energy from the National Forests.

### Recreation

The 1986 budget proposal for recreation use is $97.4 million, a 4 percent decrease from the amount appropriated for fiscal year 1985. The Forest Service will continue to emphasize its volunteer program to supplement appropriated funds in the operation and maintenance of these recreational facilities. Where feasible, private concessionaires are being encouraged to contract for management of the more developed facilities.

In the long run a greater share of the cost of providing recreational opportunities and services should be borne by the people actually receiving the benefits. The 1986 budget proposal contains an estimate of $54.9 million in receipts from recreation admission and additional user fees. Almost half of this is associated with proposed legislation to initiate additional user fees.

### Reforestation and Timber Stand Improvement

The reforestation and timber stand improvement program has two components. First, when timber is harvested deposits are made to the Knutson-Vandenberg (KV) fund. This is used to reforest and manage timber on cut over lands. In 1986, about $88.4 million will be used for this purpose. The funding of this part of the program is determined by the volume of timber harvested in previous years. Second, appropriated funding of $87.5 million is requested to reforest areas affected by natural disasters, land exchanges, etc. There is a program reduction of $10.9 million from the 1985 level when both the appropriated funds and the Reforestation Trust Fund are considered.

The National Forest Management Act established a multi-year goal of completing work on a reforestation "backlog" that existed at the time of passage. The reduction in 1986 is a result of the completion of the economically and technically feasible backlog by the end of 1985. Beginning with 1986, the annual program will be designed to maintain an annual working inventory of total reforestation needs averaging about one million acres over any 5 to 10 year period.

## Timber Sales

The National Forests furnished about 25 percent of the softwood lumber used in the United States in the last four years. Imports accounted for about 32 percent and the remaining 43 percent came from both industrial and private holdings. In recent years imports, primarily from Canada, have increased their share of the U.S. market taking advantage of the strong dollar. Total consumption in 1984 was about six percent more than in 1983 and about 36 percent more than in the recession in 1982.

The Administration's economic forecast anticipates that 1985 will be the third year in a row in which housing starts will be around 1.7 million units. For the five-year period, 1986-1990, they are expected to average 1.9 million units. The 1986 budget request proposes $542.7 million, including support costs, for timber sale offerings of 10.7 billion board feet (BBF) and assumes a harvest level of 11.2 BBF. This compares with the 1985 program of $613.2 million for 11.2 BBF in timber sale offerings and a 10.0 BBF timber harvest.

The lower volume of new sales is proposed in light of several factors:

-- In October 1984, the Federal Timber Contract Payment Modification Act became law. This law is expected to help relieve the economic stress on timber companies that had large volumes of Federal timber under contract that could not be harvested and processed profitably. Thus, it is no longer necessary to offer a large volume of new sales to be blended with the older high-priced sales.

-- Although housing starts are expected to increase through 1986 and then level off, there will still be an adequate inventory of sold but uncut timber on the National Forests. In fact, 1986 will be the first year since 1977 that the volume harvested is expected to exceed the volume sold.

-- Softwood lumber prices have risen some in recent months. However, the producer price index of softwood lumber in January 1985 was still 9.5 percent below the high reached in March 1984 and the average for all of 1984 was four percent less than the average for all of 1983. Stumpage prices for National Forest timber sales have followed similar patterns. As noted earlier, the lack of price response to the relatively high level of consumption reflects both excess capacity and the price-dampening effects of the record levels of timber imports from Canada.

-- A significant portion of the increase in home construction has occurred in the sunbelt States. These market areas have drawn wood products from areas where the National Forests are not as important a supplier as other sources.

## Construction

The budget for Construction is $209.6 million, a 20% decrease from the 1985 Appropriation. Facilities construction is decreased by $10.7 million and is targeted primarily to health and safety items. The road program is proposed at $190.6 million, a reduction of about $39 million, and will support the 10.7 billion board feet of timber sales which include 2.6 billion board feet of timber sale reofferings.

This completes my opening remarks Mr. Chairman. We will be glad to respond to any questions.

### Forest Service Programs and Changes
($ Millions)

|  | 1984 | 1985 | 1986 | 1986 Net Change |
|---|---|---|---|---|
| Research Program | $ 109.4 | $ 121.0 | $ 104.2 | $ -16.8 |
| S&PF Program | 60.8 | 58.3 | 29.7 | -28.6 |
| NFS Program: |  |  |  |  |
| NFS Funds | (1,019.6) | (1,045.7) | (1,039.2) | (-6.5) |
| Construction | (251.7) | (263.3) | (209.6) | (-53.7) |
| Land Acq. | (40.1) | (43.6) | (2.3) | (-41.3) |
| Range Betterment | (4.0) | (4.0) | (3.9) | (-.1) |
| Perm. Working Funds | (178.8) | (147.3) | (143.6) | (-3.7) |
| Coop. & KV | (231.1) | (153.3) | (153.3) | (0) |
| Reforest. Trust | (65.9) | (31.6) | (0) | (-31.6) |
| Other | (1.2) | (.9) | (.9) | (0) |
| Regular NFS Total | $1,792.4 | $1,689.7 | $1,552.8 | $-136.9 |
| Total Regular FS | $1,962.6 | $1,869.0 | $1,686.7 | $-182.3 |
| FS Pay to States | 203.3 | 238.8 | 31.9 | $-206.9 |
| Total FS | $2,165.9 | $2,107.8 | $1,718.6 | $-389.2 |
| Plus: |  |  |  |  |
| O&C Transfer |  |  | 49.8 | +49.8 |
| Interchange (BLM/FS) |  |  | 14.4 | +14.4 |
| Coop. Road Mtc. (BLM) |  |  | 5.1 | +5.1 |
| Subtotal | $2,165.9 | $2,107.8 | $1,787.9 | $-319.9 |
| Plus Pay. to States: |  |  |  |  |
| O&C |  |  | 34.8 | +34.8 |
| Coos Bay Wagon Rd. |  |  | .6 | +.6 |
|  | $2,165.9 | $2,107.8 | $1,823.3 | $-284.5 |

# Forest Service

Major Considerations

- Economic recovery and the Budget Deficit
- Housing starts
- Increased receipts to the Federal government
- Increased Forest Service efficiency
- Research backup for future resource and technology needs
- State and local responsibilities for resource supplies

Forest Service

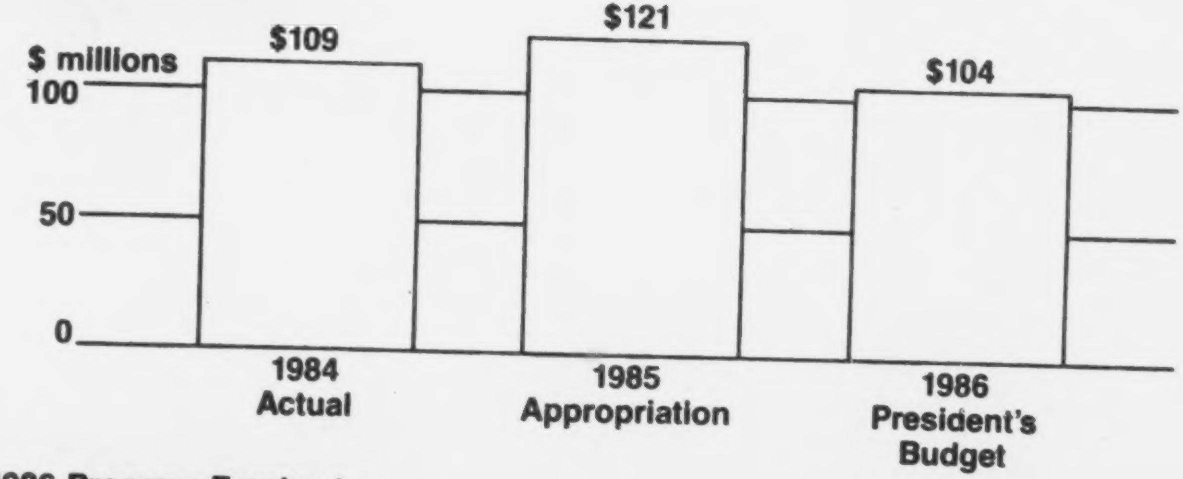
## Summary Comparison

**($ millions)**

| | 1984 Actual | 1985 Appropriation | 1986 President's Budget | Change from 1985 |
|---|---|---|---|---|
| Regular Appropriations | $ 1,487 | $ 1,537 | $ 1,390 | $−147 |
| FS/BLM Interchange | 0 | 0 | 14 | +14 |
| O&C Transfer | 0 | 0 | 50 | +50 |
| Total Appropriated | $ 1,487 | $ 1,537 | $ 1,454 | $ −83 |
| Permanent Appropriations: | | | | |
| Working Funds | 179 | 147 | 144 | −3 |
| Payments to States | 203 | 239 | 67 | −172 |
| Trust Funds | 297 | 185 | 158 | −27 |
| Total | $ 2,166 | $ 2,108 | $ 1,823 | $−285 |
| Work Force (FTEs): | | | | |
| Forest Service Regular | 40,134 | 39,800 | 39,000 | −800 |
| O&C/Interchange | 0 | 0 | 1,080 | +1,080 |
| Receipts | $ 1,030 | $ 1,460 | $ 1,465 | $ +5 |

Forest Service

## Research

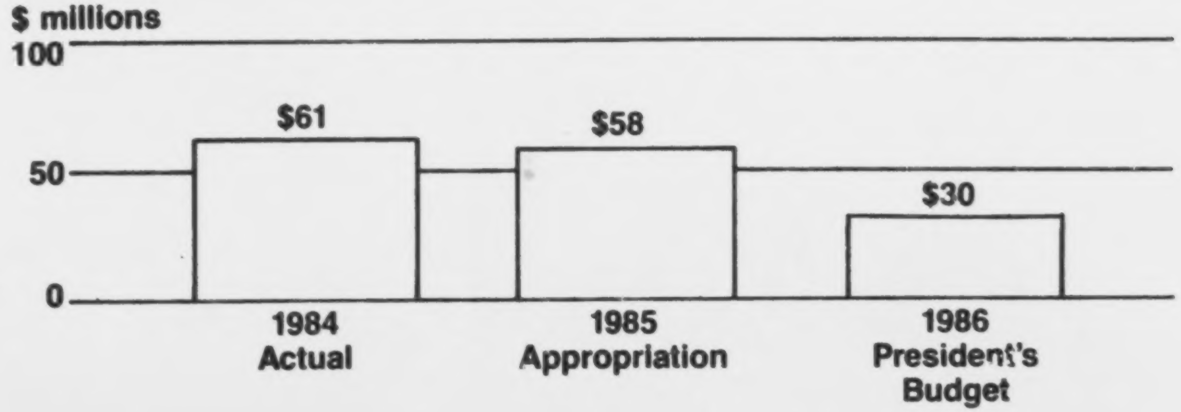


1986 Program Emphasis:

- Timber Management and Genetics
- Protection of Resources
- Acid Rain
- Old-growth Wildlife Habitats
- Forest Economics and Inventory/Analysis
- Forest Products and Harvesting
- Range, Recreation, Wildlife, Fish, Watershed and Mined-area Rehabilitation

Forest Service

## State and Private Forestry

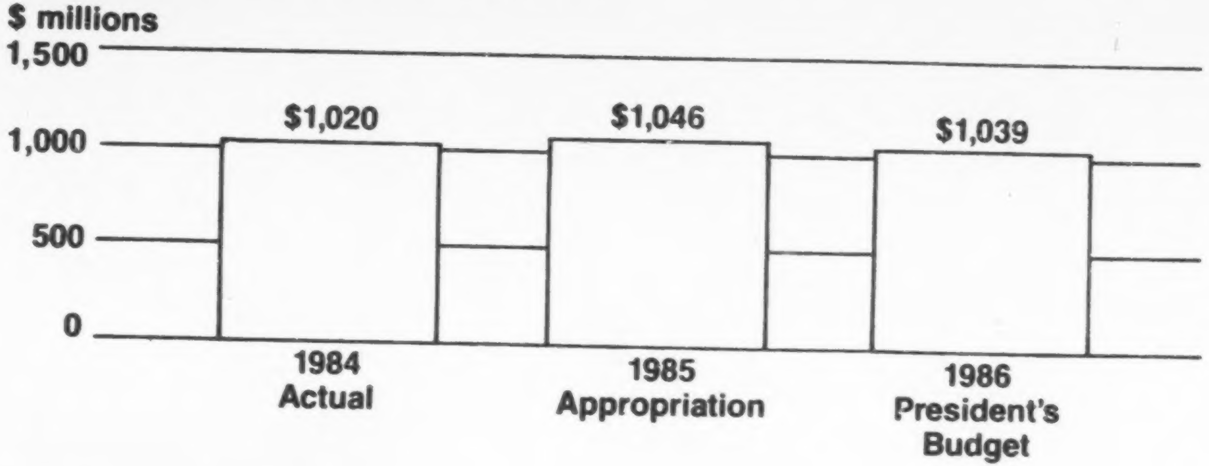


**1986 Program Emphasis:**

- Forest Pest Management on Federal Lands
- Special Projects (BWCA)

Forest Service

# National Forest System



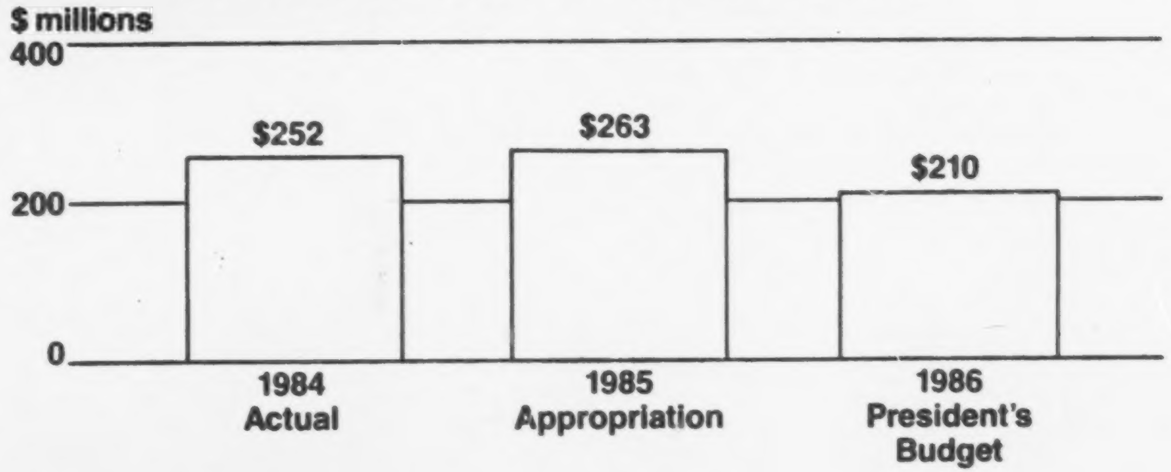
**1986 Program Emphasis:**

- Federal Timber Contract Payment Modification Act
- Minerals

Forest Service

## Construction

### (Excludes Timber Purchaser Credit Program)

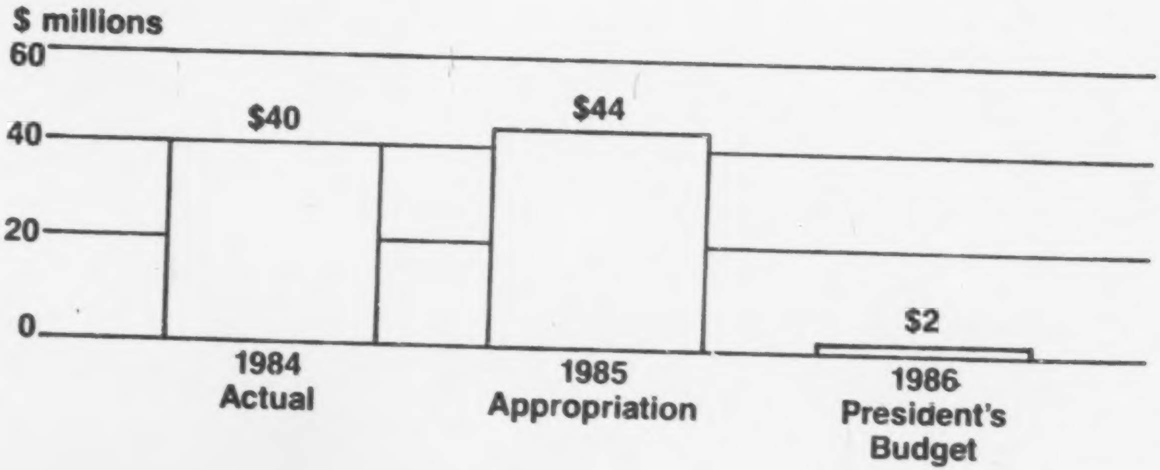


**1986 Program Emphasis:**

- Access for timber sales
- Critical support facilities, particularly health and safety

Forest Service

## Land Acquisition

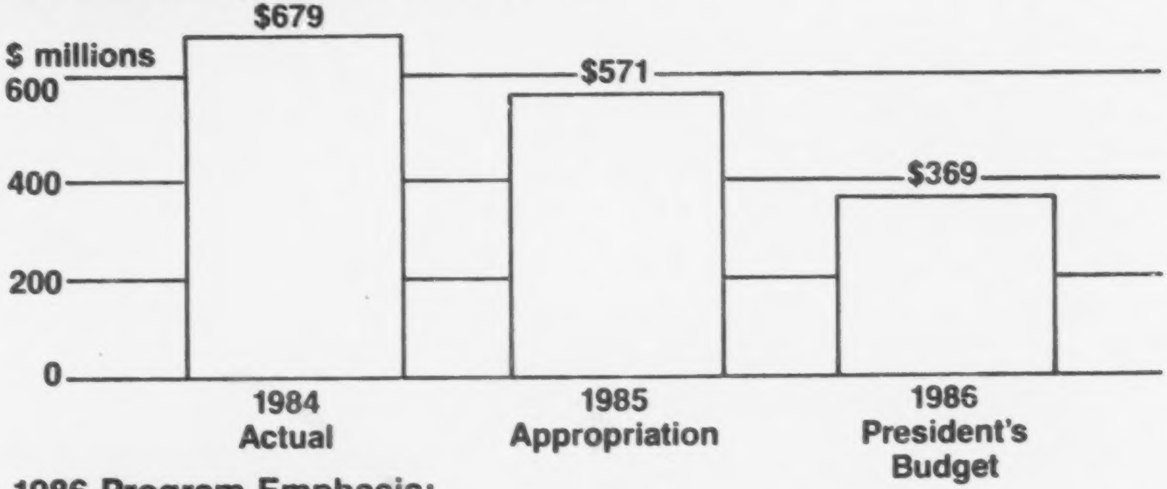


**1986 Program Emphasis:**

- Closing existing L&WCF cases
- No new purchases

Forest Service

# Permanent/Trust Funds



1986 Program Emphasis:

- ● Timber Salvage Sales
- ● Tongass Timber Supply Fund
- ○ Brush Disposal
- ● KV Reforestation and Timber Stand Improvement

STATEMENT OF
R. MAX PETERSON, CHIEF
FOREST SERVICE

Before the

Subcommittee on Forests, Family Farms and Energy
Committee on Agriculture
United States House of Representatives

Economics of Federal Timber Sales

FEBRUARY 26, 1985

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

We appreciate the opportunity to provide you with information on the economics of Federal timber sales. There has been much said and written during this past year on the issue, and we thank the Committee for allowing us this opportunity to provide you with our views and answer questions you may have.

In the course of my testimony, I would like to: 1/ emphasize the broad purposes for which the National Forest System are managed, 2/ present examples of actual situations that help illustrate the complexity of the issue and the need to look at all resources in both the short and long term, and 3/ update you on actions that we have taken or have underway, that respond to the questions and concerns that have been raised on the economics of National Forest System timber sales.

Eighty years ago the Forest Service was created. At that time, the Forest Service was given a charter to manage the National Forest System lands in the public interest on a sustained basis. This mandate was interpreted as "the greatest good of the greatest number in the long run." Our management philosophy and organization have grown around that mandate from Congress.

Even though the overall mission of the agency has not changed significantly over these 80 years, changes have occurred in how the mission is met. Protection and management of the National Forest System for the optimum combination of goods and services over time remains the major mission. The complexity of achieving this mission has increased, the demands for natural resources are greater, and the interest and involvement of the public continues to grow. More people than ever have an increasing interest in the management of public lands. It is important to remember that the National Forests were established to protect and provide a valuable supply of natural resources on a sustained basis in the long term.

Congress has established a direction that clearly demonstrates the importance of these lands to our Nation's welfare. Whether one looks at the Organic Act of 1897, the Knutson-Vandenberg Act of 1930, the Multiple-Use Sustained-Yield Act of 1960, the Forest and Rangeland Renewable Resources Planning Act of 1974, the National Forest Management Act of 1976, or other laws, one common theme is the vision or long-term management perspective. Even though balanced use of resources in the short-term is of high importance, long-term sustained management of the land has been a condition that remains paramount.

Renewable resources such as recreation, range, timber, watershed, and wildlife and fish, as well as non-renewable resources such as energy and minerals, must be managed, protected, and used in a manner that assures adequate resources available for future generations. To do this, investments must be made now in order to meet future needs. Erosion control measures and improvements for fish and wildlife habitat may not always show positive short-term benefit cost ratios. Investments are being made now to plant trees that will not be harvested for 80 to 100 years. Likewise, capital investments for campgrounds, trails, roads, and bridges are made today even though many of the benefits that justify their construction will not be realized for years into the future. In almost all cases, roads for a particular timber sale have value above and beyond their utility for the removal of trees in the present stand. They provide access for fire protection, public access for recreation, and a transportation network necessary for the future management and utilization of National Forest resources. They are planned, located, designed, and constructed to fit multiple purpose long-term needs and not just one initial sale or other project.

The current questions regarding the economics of Federal timber sales have been raised in many cases because the long-term perspective has been largely ignored or set aside in favor of judging economic viability by comparing this years costs to this years direct receipts. For example, investments and actions related to a timber sale that do not provide a short-term profit based simply on a one-year comparison of total expenditures compared to receipts have been judged by some to be below-cost.

It should be noted that Forest Service timber sales can be one vehicle for achieving broad resource management goals. They are used, for example, to improve wildlife habitat, maintain long-term favorable water flows, reduce insect and disease problems, enhance future timber productivity by capturing timber mortality through salvage sales, and to replace stagnant stands with vigorous young-growth. In carrying out a timber sale program to meet these multiple objectives, it is likely that specific sales may cost more to make than they initially return even when timber related costs are properly accounted for. Our intent is that, when such a case exists, the non-timber multiple use, as well as future timber, objectives that would be achieved are carefully laid out and explained. There is no doubt that for the overall timber sale program the value of the timber sold does exceed the costs. For example, in fiscal year 1984 the cost of the timber sales program on the National Forests, excluding the long-term investment of road construction, was $303.8 million and the value of the timber sold was $701.4 million. This is true even though the timber sale program includes substantial costs incurred to protect and enhance other values. Road costs, associated with this timber program, totaled $273.1 million in 1984. From 1978 to 1983 the cost of the timber sale program, including roads, amounted to a total of $2.9 billion. The value of the timber harvested was $4.3 billion and the value of the timber sales for future harvest was $8.4 billion.

The timber from these management activities creates employment and helps stabilize or develop local and regional economies. And without an adequate supply of National Forest timber, lumber and wood product prices would rise significantly, costing consumers substantially more for housing, as well as other wood related products. This would lead to major increases in consumer expenditures, increase lumber imports, and have some impact on the balance of trade. It is difficult to attribute such benefits to specific individual timber sales, but they do exist and should be recognized in any analysis relating to the pros and cons of selling National Forest timber.

For just a moment, I would like to draw your attention to a couple of individual cases that will help to demonstrate how the long-term, broader perspective frequently offers a significantly different picture than the short-term, single purpose view of one particular activity.

(Example #1)

In this case it is clear that if this area were managed only to return a short-term profit, the timber resource would not be utilized because short-term costs outweigh the short-term benefits; however, since it is possible to look ahead at the costs and benefits in the five decades ahead, we see that once the initial investments are made, the timber resource shows long-term profitability. This example shows how individual timber sales are dependent on each other. It is possible for an individual sale to return less than it costs and still to have achieved greater economy over the entire program.

Let me provide another example that illustrates how various social values, such as scenic, wildlife, and watershed resources, influence management of National Forest System lands.

(Example #2)

In this case, because of the values placed on the non-commodity resources and the condition of the forest, the investment in both the short-term and long-term results in negative cash flows. Even so, because of the social values associated with the scenic resource and wildlife, and forest protection problems in the watershed, it is highly desirable that this activity be undertaken. Placing dollar values on these social benefits is a challenge to our economists and managers. Likewise, getting public agreement and acceptance of the benefit values in resource economics is a challenge; however, the state of the art continues to improve in this area of analysis. Similarly, our overall ability to plan resource protection and management has developed significantly in the past decade.

Utilizing the Forest Planning process, we have a method of analyzing the economics of management activities. Forest plans, some of which have already been completed, provide the analysis and evaluation necessary to determine how the resources on a Forest will be managed, what it will cost, and what the environmental consequences will be, including the socio-economic impact and benefits to local communities.

The land management planning process, which was developed with the assistance of a committee of scientists from outside the Forest Service, not only helps managers determine the best and most cost-effective use of resources, but also allows us to schedule their use so that adequate supplies will continue in the future. The process also identifies which long-term investments should be made and when. Since completion of Forest plans is in itself probably the single most important analysis and information base for determining which activities will occur and how those activities will be scheduled on National Forest System lands, we will be briefing members of the Congress as Forest plans are finished.

The planning effort throughout the country has resulted in a blending of professional interdisciplinary expertise and public participation, which deals directly at the ground level with the complex issues of management today and the future, including the economics of those actions.

With this as background, I would like now to review some additional actions that we have taken which respond to the need to provide better information and respond to concerns about the economics of timber sales on National Forest System lands.

First, as Mr. MacCleery explained, we are considering a policy that would help improve the cash-flow position of individual National Forest timber sale programs. The policy would make it clear that it is our intent that the total benefits from a timber program on a National Forest should exceed total related costs. The policy analyzed would also provide assurance that the minimum selling price for National Forest timber would be established at a level sufficient to insure that we recover the direct costs of sale preparation and administration. For example, if the direct cost for sale preparation and administration are $20 per thousand board feet, we would establish the minimum price at $20 per thousand board feet. There are some exceptions proposed which would allow some sales at lesser rates when the sale represents the most cost-efficient method of protecting the forest from insect, disease, or fire; attaining identified multiple-use purposes such as wildlife habitat; or retaining reasonable community stability. For the most part the policy would assure that basic direct costs are recovered. Another provision of the policy we are considering would limit increases in the timber sale programs in areas where there has been an unfavorable cost-revenue relationship in the previous five years, reflecting a stagnant market or possibly a supply-demand imbalance. I will be happy to provide more detailed information if you have questions later.

Second, in response to Congressional direction, we are currently reviewing accounting procedures to determine if we can more accurately estimate the costs and benefits associated with the timber sale program on a National Forest. A special group has been organized to accomplish this task. Our initial report, identifying four principal tasks, was submitted to the congressional appropriations committees in December. We are presently in the investigation stage, with design, testing and recommendation steps to come in that order. It is already obvious that it is relatively easy to determine costs. However, to quantify the wide array of benefits and impacts of different uses and therefore relate overall costs to benefits is quite complex.

Assisting us in some parts of this effort are personnel from the private foundation of Resources for the Future and Oregon State University. Resources for the Future is working on development of a methodology for identifying and evaluating multiple-use benefits associated with timber management and will develop case studies in application of multiple-use accounting procedures. Oregon State University is making a survey of the private forest industry and is evaluating their accounting systems.

By summer, we hope to begin testing and evaluating alternative methods of relating costs and benefits. Next year, we expect to be ready to implement any changes in our present system that are determined to be appropriate from the study. As a part of the investigation stage, we have already found that there does not appear to be any system now in use in any public or private organization that accounts for all the costs and benefits associated with a timber management program which is designed to meet multiple use objectives.

To keep others informed on the study, we have identified and have been in contact with other agencies, organizations, and individuals that have expressed interest in the economics of the Forest Service timber program. These contacts include the Wilderness Society, Natural Resources Defense Council, National Forest Products Association and the Society of American Foresters, as well as the General Accounting Office, Congressional Research Service, and the Office of Management and Budget. We plan to keep these groups informed and will continue to work with and provide current information to the affected Committees as the study progresses. One of the purposes of the timber accounting system study is to determine if there is a better way to track costs and benefits of timber sale programs for decision purposes. Along those lines, we have provided more information this year in the Annual Report of the Forest Service for 1984 which you have or which you will be receiving very shortly. In it, for example, we included a table which compares by Region the cost of the timber program to the value of 1) timber and other products sold, and 2) additional outputs associated with this volume. The table does not include other types of benefits such as employment and taxes, but it shows some important relationships. I have provided the Committee with copies of this table and will answer any questions you might have as to what it shows or does not show.

Third, we recently evaluated the relationship of cash flow to the timber sale program on the Black Hills National Forest. From the findings, we have identified several specific opportunities and recommendations that will be reviewed in other areas on a Forest by Forest basis. Through increased uses of economic analysis, opportunities to reduce costs were identified in both timber practices and silvicultural planning. The study resulted in recommendations for improvements in our budgeting practices and land management planning. It also identified the need to establish specific financial criteria for decisionmaking on a national basis. We are planning to initiate similar evaluations on some other Forests in the near future.

## SUMMARY

By law, the National Forests are managed on a multiple-use, sustained-yield basis. Both the costs and benefits of activities carried out under this mandate are so interrelated that allocation of costs and returns to individual resource activities is, in the final analysis, a matter of judgment with which reasonable people may differ. Other approaches that do not rely on allocation of costs, such as identifying the total benefits achieved by the timber program are also being evaluated. Timber sales on a National Forest provide multiple benefits, such as wood for the local mill, increased forage for cattle and wildlife, access for dispersed recreation, fire protection and access to capture mortality or treat an insect or disease outbreak. In order to achieve these multiple benefits, higher costs are encountered for sale preparation and administration than would be involved if only wood production were the objective. Because the resulting benefits include those which can be assigned a dollar value, as well as benefits to which no dollar value can readily be given, comparison of costs and benefits is complex and inherently subjective. We continue to work on methods to improve our ability to track costs and benefits in all affected resource areas. We are also undertaking a number of other policy changes and improved management initiatives as a means of reducing the costs of the timber sale program. This Administration is committed to holding Forest Service managers accountable for meeting cost control and output production goals. Necessarily, this involves providing improved financial management information.

The best process we have for examining both the economic and social consequences of multiple-use forestry decisions is the "Forest Land and Resource Management Plan." The planning process which is currently underway, as required by the National Forest Management Act of 1976, allows for evaluation of interactions among resources based on various mixes of programs and land management alternatives. This provides direction, with benefit of extensive public participation, as to how National Forest System land should be managed in the short-term to assure that the long-term values are guaranteed.

Mr. Chairman, this concludes my prepared testimony. I would be happy to respond to questions you might have.

STATEMENT OF
DOUGLAS W. MACCLEERY
DEPUTY ASSISTANT SECRETARY, U.S. DEPARTMENT OF AGRICULTURE

Before the

Subcommittee on Forests, Family Farms and Energy
Committee on Agriculture
United States House of Representatives

Economics of Federal Timber Sales

FEBRUARY 26, 1985

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

I appreciate the opportunity to present the Administration's views as the Subcommittee considers issues relating to the economics of Federal timber sales. I am accompanied today by the Chief of the Forest Service, R. Max Peterson. My comments will be from a broad perspective on this issue as the the Department views it today, while Chief Peterson will deal with more specific details, examples, and status of actions currently being taken relating to this issue. We are pleased to have this opportunity to provide you with our views and answer any questions you may have.

First let me assure you that the economics of Federal timber sales, or for that matter economics of any current or proposed program, is of major and continuing interest to the Department. It is our overall policy and intent that the Federal Government should receive fair market value for resources that are provided from the National Forest System lands. In the past four years the Department has focused a considerable attention on improving the quality of economic analysis of Forest Service programs, particularly resource management programs on the National Forest System. We have been particularly interested in assuring that the National Forest land management planning, which is now going on and which Chief Peterson will discuss later, fully evaluates both the environmental and the economic implications of the resource management options that are available and that the planning documents clearly display the economic and environmental tradeoffs associated with each planning alternative. A paper issued by the Assistant Secretary's Office, dated October 10, 1983, clearly lays out what the Department feels is the appropriate role of economic analysis in National Forest land management planning and decisionmaking. I would like to submit this paper for the record.

The Forest Service is directed by statute to manage the National Forests in the long-term to provide a wide range of multiple-use resources, most of which are interrelated in various ways. For example, development of a road into an area may provide access for timber management, while at the same time increasing recreational opportunities such as hunting and fishing, improving forest protection from fire, insect, and disease, and allowing for more intensive wildlife and water resource management. Professional forest managers who understand and manage these relationships are many times able to achieve a number of management objectives through one on-the-ground activity.

The complexity of this type of integrated forest management has increased significantly over the past decade as foresters have continued to develop ways to improve the quality and increase the quantity of resources that can be produced from a somewhat declining forest land base. As the complexity of forest management has grown, accounting for the costs and benefits has likewise become more complex. A major part of this current issue centers on properly accounting for all the costs and benefits of the timber program. Adding to the complexity of the resource evaluation process is that some resources, like timber, are able to be priced and assigned a dollar value, while others, such as scenic resources, cannot readily be assigned a value in dollar terms, but are nonetheless important.

In management of public lands, there are many questions that must be answered, most of which deal with what economists refer to as input-output relationships, i.e., costs-benefits. We believe long-term benefits should exceed total timber related costs unless an unusual circumstance exists. An important distinction, however, is the difference between "costs and benefits" and "costs and revenues". The various policy, social, political, and other related considerations require that total benefits, both priced benefits and non-priced benefits, be considered in National Forest management.

The current land management planning is designed and intended to answer management questions using the best possible information on benefits and costs of various alternative approaches. This process is designed to assure that multiple use direction is followed and net benefits, that is benefits minus costs, are maximized in a long-term overall perspective, not just an individual short-term activity such as one timber sale. We are continuing to develop and enhance our ability to analyze these complex multi-resource questions. The planning process is intended to result in selection of a management alternative that contains a level and mix (both priced and non-priced) that is optimal, to the national social welfare.

The Department intends that the Forest Service address the below-cost sales issue in a number of ways. First, consideration needs to be given to clarifying current Forest Service policy as it relates timber management. Such policy would make clear the intent that the National Forest timber sale program be conducted in an economically efficient manner. Exceptions might be permitted where an overriding objective such as protection of the forest from substantial insect epidemic or fire, or attainment of other important non-timber objective, including maintenance of the stability of dependent communities, would be most efficiently achieved by selling timber below cost. Additional elements of the policy under consideration are to establish a minimum bid price for regular timber sales that would cover the average cost of sale preparation and administration, and to adjust timber sale volumes that would be offered in a way that would be more responsive to market demand.

A second element in our approach is to evaluate various options for a cost accounting system which better identifies costs and benefits attributed to the timber program. This is a complex issue due to the fact that the activities associated with timber management produce non-timber multiple benefits and also incur costs beyond those that would be necessary to produce timber alone. Even the least cost timber management practices produce non-timber benefits and in some cases it is efficient to enhance production of non-timber benefits by deciding to incur additional timber management costs. It is important to know the values of these non-timber benefits to come to correct conclusions on timber management and to guide decisions on incurring additional discretionary costs through the timber program to produce additional non-timber benefits. Chief Peterson will describe the progress of our effort to evaluate cost-benefit accounting systems later.

The third element of our approach to improving the economics of timber production is to continue efforts to evaluate and reduce the costs of the

National Forest timber program, as well as to increase timber revenues. The amount of timber that is sold below cost can be reduced, once we can define more accurately the applicable timber costs, by reducing the cost side of the equation and enhancing the revenue side. The agency has made considerable effort over the past couple years to reduce the costs and increase revenues of the Forest Service timber program. Last year the Forest Service sent a team to the Black Hills National Forest to evaluate what might be done to reduce timber related costs and increase revenues. This team found that there are considerable opportunities to do both. Further, it is the judgment of the team that similar opportunities exist on other National Forests. The Forest Service will be exploring these opportunities in the months ahead. We have already been implementing a number of initiatives to reduce costs and enhance revenues. I will not go into detail at this time, but the following are a few examples of the kinds of actions that have already been taken:

1. Reduction of road costs. Since 1980, road construction costs have decreased. This reflects not only a decrease in the amount of road constructed, but also a reduction in the per unit cost of construction principally by being sure that the standard of road is that which is necessary to meet management objectives--being sure that roads are not overbuilt.

2. Overall reduction in timber sale program costs.

3. Implementation of a number of improvements recommended from internal review of the timber program designed to evaluate agency effectiveness and efficiency, including sales preparation, sell, and administration of timber contracts, as well as recommendations for other activities such as reforestation and fuels treatment.

4. Requiring higher initial payments and mid-point contract payments for timber purchasers.

5. Providing for shorter term timber sale contracts.

6. Increasing firewood sales and establishment of a $10.00 minimum permit cost.

7. More economic analysis in project planning and monitoring of projects.

The Department is committed to continuing to manage the National Forest System lands in the most cost effective way possible to provide the wide range of multiple-use resources and benefits to the American public. I again appreciate the opportunity to provide you our views and will remain with Chief Peterson to answer questions you may have later.

SCRIPT

## DEER PEAK AREA

This map shows the location of the project in the State of Montana. The Deer Peak Timber Sale project area is located on the Ninemile Ranger District, Lolo National Forest, Region One. The Lolo National Forest is located in extreme Western Montana. The city of Missoula Montana is located within the Lolo Forest and is the economic and cultural hub of the area. The Ninemile District is located just west of Missoula in this area and goes all the way to the Montana-Idaho state line. It is bisected by the Clark Fork River and U.S. 90 interstate highway. The district varies in elevation from approximately 2900-8000 feet. It is mountainous with wide valleys, steep topography and is primarily tree covered. The Lolo forest is approximately 2.1 million acres in size and the Ninemile district occupies about 360,000 of those acres. An additional 140,000 acres of private land is located within the district boundary. Important tree species are ponderosa pine, larch, Douglas fir and lodgepole pine. Commercial timber harvest started in the late 1800s in support of mining and railroad construction.

The next map is the proposed action for the Lolo National Forest land use plan.The project area is colored green on this map and is located approximately 25 air miles directly west of Missoula. The blue areas represent designated wilderness areas such as the Rattlesnake Wilderness just north of Missoula , the existing and proposed wilderness areas in Rock Creek just southeast of Missoula and the proposed Great Burn Wilderness area just west of the Deer Peak project area. The small blue area just south of the project area is the Lolo portion of the massive Selway Bitterroot Wilderness area. The white areas on the map indicate other National Forest Land. The gray areas around the project area are private land, mostly highly developed industrial timber land. The gross project area is nearly 9000 acres. Included within the area is the Garden Point RARE II area #01809, which is about 6900 acres. The area was recommended for non wilderness in the RARE assessment and is being managed as non wilderness under the Lolo Forest plan.

This chart is a large scale map of the project area. The large black lines indicate the boundary of the analysis area. The blue shaded areas indicate private industrial timberland. The crooked narrow black lines indicate existing roads.
The attributes of the area are displayed in the photos.

#1 shows steep tree covered slopes, non distinct scenery.

#2 shows mixture of young and old trees. mosaic pattern is caused by past fire history.
#3 shows young timber in foreground and old timber in midground.

#4 close up of old timber, note fungus fruiting body on tree bole in upper right of photo. Indicates extensive rot in tree.
#5 shows a mixture of young and old timber caused by past forest fires.

#6 mature timber , note tree top in lower right that has been defoliated by . western spruce budworm.

#7 snow in openings in back ground shows rocky areas that raise road costs.

#8 typical timber of larch, Douglas fir, ponderosa pine and lodgepole pine

The area is a tree covered undeveloped block of land, surrounded on three sides timber harvest and road development. It has no craggy peaks or outstanding scenery. It is important summer and fall elk habitat and is an important elk hunting area because of its undeveloped nature and a primitive road on the west boundary that allows elk hunters with horses to camp on a road but still have an elk hunting experience in an undeveloped area. The area has the reputation for good elk hunting and is politically sensitive at the local level because of that perception.

Most of the Deer Peak project area is within Management Area 16 of the Lolo National Forest Land Management Plan, the draft EIS for this plan was published in the Federal Register on Feb. 22, 1985. The attributes of the area are reflected by the management goals for management area 16. These goals are shown on the next chart and are:
A. The area is to provide clean water and stable streams. Clean water produced on the area is important for downstream uses and to help maintain water quality standards in the Clark Fork River a few miles to the north.
B. The area is to provide healthy and growing stands of trees and help sustain a long term supply of timber products from the Lolo N.F.
C. The area is to provide opportunities for outdoor recreation. In this part of the Lolo Forest elk hunting is the most important outdoor recreation, but deer and bear hunting are also important. Other outdoor recreation is; huckleberry picking, grouse hunting,hiking,horseback riding as well as snowmobiling in the winter.
D. The elk and big game hunting can only be provided by maintaining the productivity of the big game habitat. This means providing feeding areas as well as hiding and resting areas for the elk and deer.

The management emphases from the Lolo Forest Plan were used in guiding the Environmental Assessment of the timber sale proposal in the Deer Peak Area. This assessment has been underway for some time. As part of that assessment a long term economic analysis of the three primary alternatives was made. All alternatives developed a positive Net Present Value when analyzed over a 50 year period. The tool that is used for this analysis is the LOLO TIMBER SALE ECONOMIC ANALYSIS MODEL.

The proposed action is shown on the next chart. This chart is a map of the proposed timber sale in the Deer Peak area. The; map shows timber harvest and road construction in the area for the next 20 years. Approximately 1700 acres of timber harvest will yield almost 19 ;million board feet of timber products. Approximately 43 miles of road will be needed during this period.

The map shows the major existing roads as solid lines and the proposed roads as dotted line . The green areas indicate proposed treatment units dispersed throughout the project area. There are several reasons for this dispersion, one is the past fire history that has left us with a mixture of young and old timber stands. We plan harvest in the old mature timber stands. Other reasons area to meet the management direction given in the Forest Plan to provide clean water. Head waters of small streams are fragile, harvest units are designed to not impact the entire headwater basin of these areas. These are also very important to the elk in the summer.
Units are also designed to provide hiding areas for elk during hunting season and timber sale activities. Human traffic on the area will be managed by placing gates at road junctions. These roads will provide good walk in hunting and a quality hunting experience.
This type of land management, providing clean water and stable streams; providing a productive big game habitat; providing a quality hunting experience along with timber products over a long period of time costs more than just managing for timber alone. The following chart indicates the costs of this type of management.

The cost of management according to goals and direction of the Land Management Plan are shown is shown on the following chart. (Financial Summary Chart)

The FINANCIAL SUMMARY CHART indicates the cost of forest management under the Land Management Plan.

TIMBER VALUES reflect the value the U.S. Government receives for timber sold.

OTHER COSTS reflect the costs of the wildlife bilolgist, soil scientist, hydrologist and other specialists in planning and administering the project.

OTHER TIMBER COSTS include the cost of preparing the area for reforestation through slash treatment and a combination of planting and natural seeding.

ROAD COSTS include the cost of road construction as well as transportation planning, survey, design and project administration.

The dollar values in this chart are not discounted and show the flow of Forest Service costs and timber benefits over a period of five decades. It is clear that because of the high road costs in the first decade the net value is negative. But since the roads will be used for successive entries, it is necessary to look at later entries to get a complete picture of the returns associated with the first decade road construction. The net value of entries in the second through the fifth decade is positive, and by the fourth decade the negative value incurred in the first decade is offset. Thus when viewed as a long term investment, timber management in this area, including road costs, is a positive cash flow situation.

Since alternative methods of managing an area for timber have different cash flows over time, it is difficult to make comparisons using cash flow. By using a technique called discounting, it is possible to compress costs and benefits occuring over time into an equivalent value at one time. The discounted net value, also called the present net value, of the preferred alternative is shown on the next chart. It shows that the preferred alternative has a positive present net value of 570 thousand dollars.

In order to show the cost of managing for multiple resource values, we designed an alternative that would manage for a single purpose which was timber. Although this alternative is not consistent with the direction for this area from the draft Forest Plan, it does show the present value of costs and benefits with this type of single purpose management. While the costs are essentially the same in both alternatives displayed, the benefits are almost 50 percent higher because the timber is harvest much quicker. The assumptions associated with the single purpose management alternative are as follows:

1. Harvest all mature timber and build all roads in only 10 years.
2. Use tractors for skidding on steep slopes.
3. Do no site preparation other than skidding.
4. Have very limited treatment of slash and debris from logging.
5. Plan for no tree planting.

While the single purpose management alternative is not a viable alternative, it does show the cost of managing for multiple resources according to governing laws and regulations. In this case, the difference between the alternatives is 3.9 million dollars. And what specifically are the multiple resource values that would be impacted if the single purpose type of management were implemented? It is estimated that the productivity of the elk winter range would be reduced by 90 percent in the first decade and would not recover until the third decade. The productivity of the land to produce timber would be reduced by 40 percent on 12 to 15 percent of the area. Because of rapid timber harvest in the first decade headwaters of the streams will scour and destabilize downstream channels and adversely impact riparian habitat.

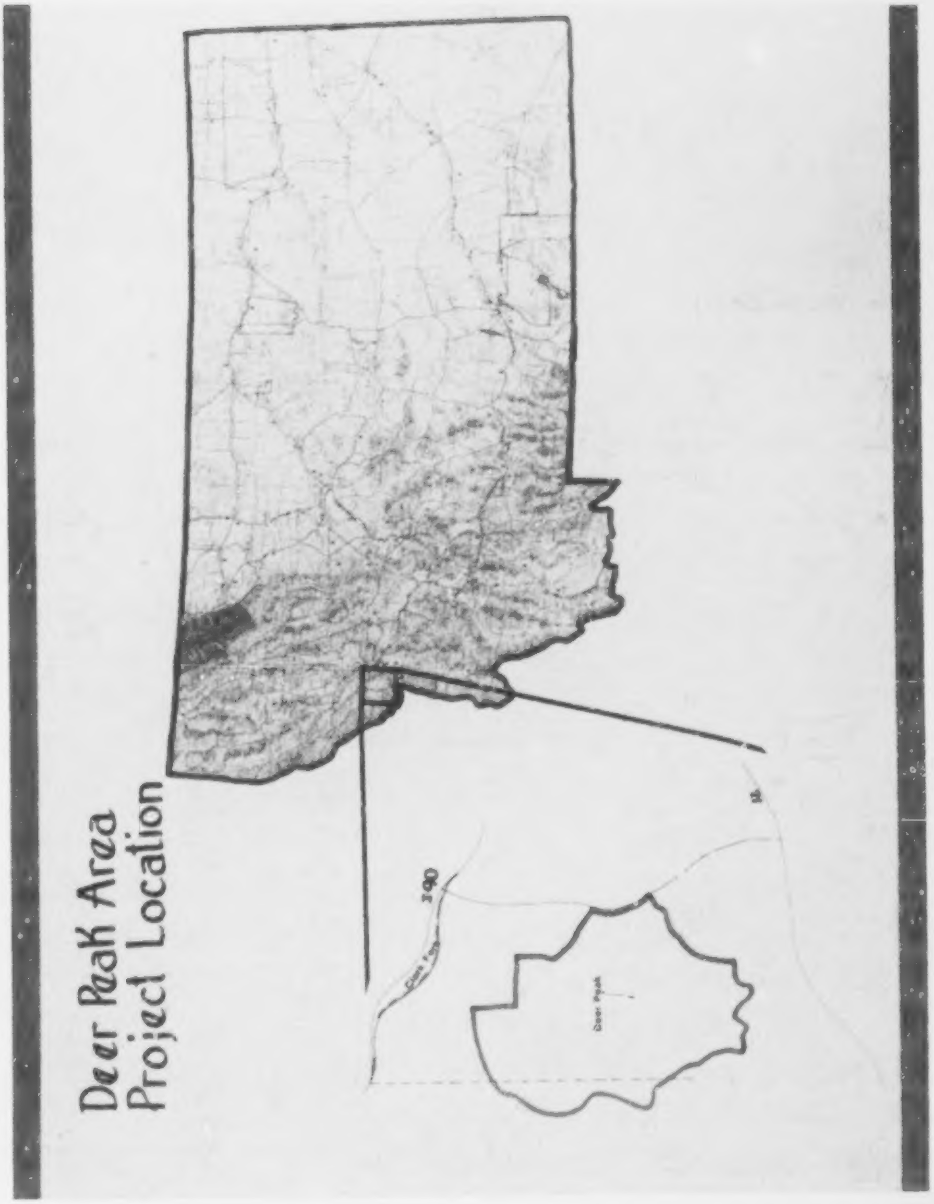
Thus there are significant, measurable environmental costs associated with the higher monetary values associated with a single purpose management alternative. In like manner there are other non-monetary benefits associated with the proposed alternative that is consistent with the draft Forest Plan. The final chart displays some of these other benefits.

A more health diverse forest will result. It will be more resistant to insects and disease. The important elk habitat productivity in the project area will be maintained at the present level. A quality hunting experience will be provided with easier "walk in" access. The quality of water produced from the area will be high and the riparian environment will stay intact. The probability of large forest fires will be reduced by improved access and more diverse timberstands. The area will continue to help maintain timber related employment in Western Montana.

## Appendix
## Deer Peak Area

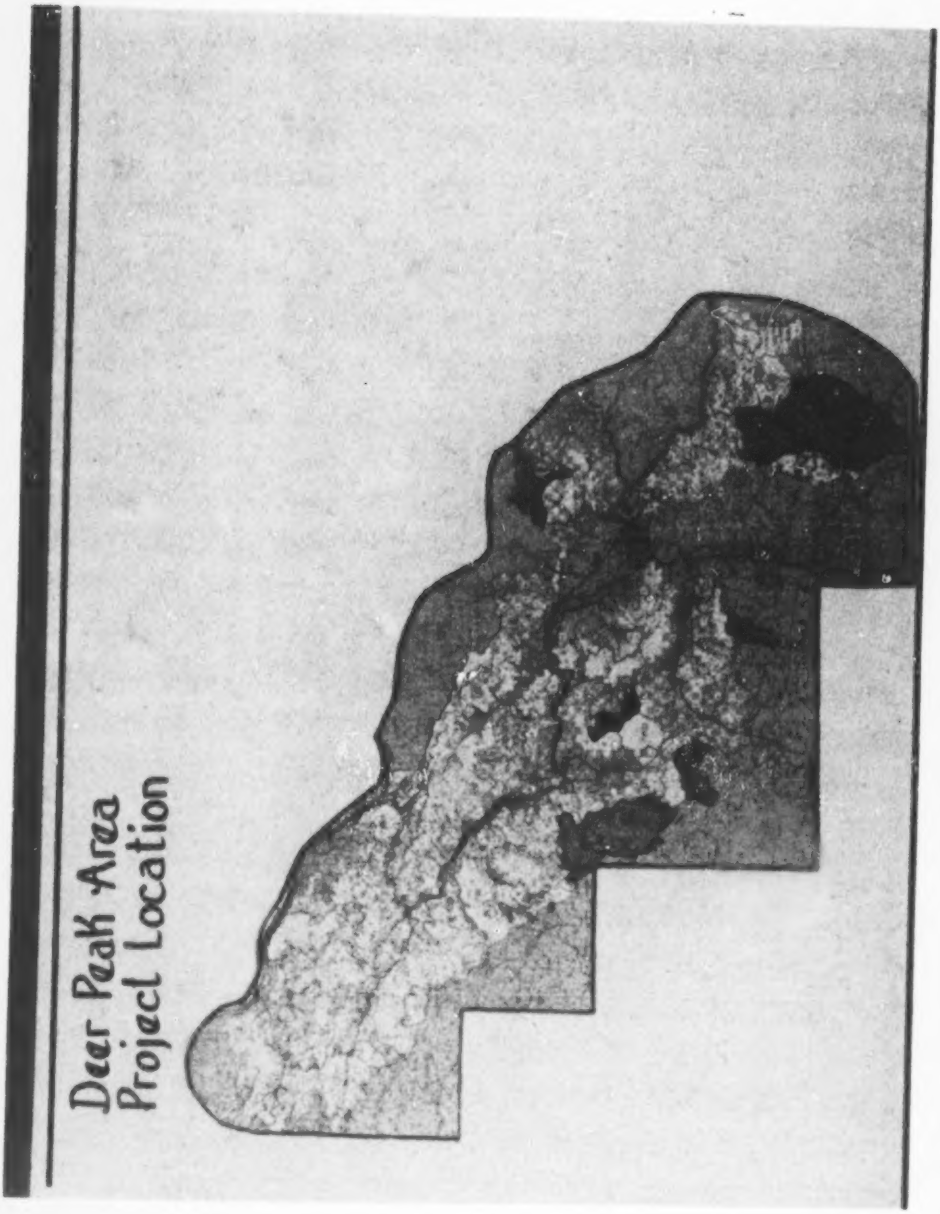
## Outputs & Effects

| | Decade | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| Timber Volume (MMBF) | 16.4 | 2.9 | 18.6 | 5.3 | 20.2 |
| Value (M $) | 1275 | 230 | 2670 | 1406 | 3796 |
| Firewood Volume (Cords) | 1067 | --- | 360 | — | 275 |
| Miles of Road | 42.7 | — | 14.4 | — | 11.0 |
| Jobs | 230 | 41 | 261 | 75 | 284 |



Deer Peak Area
Project Location

390
Deer Peak



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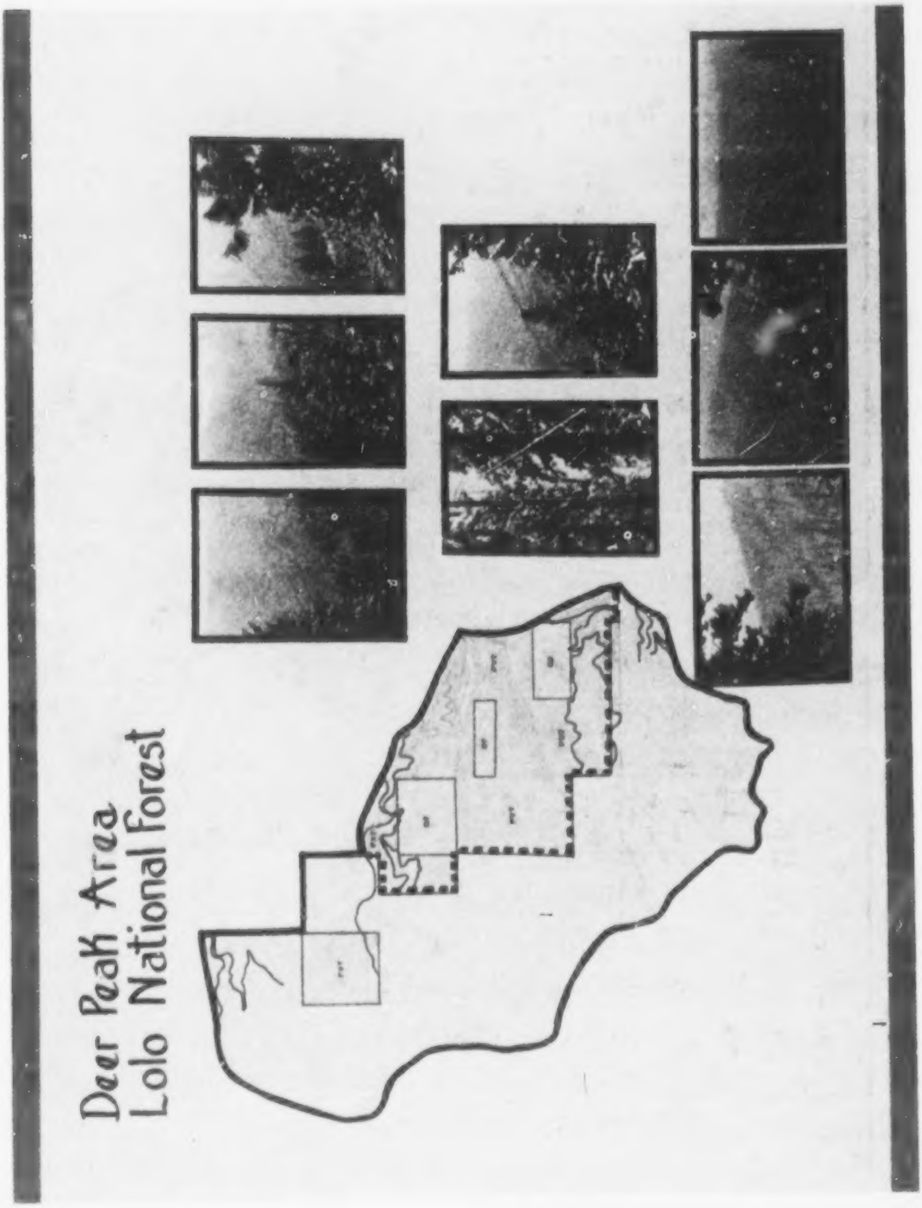
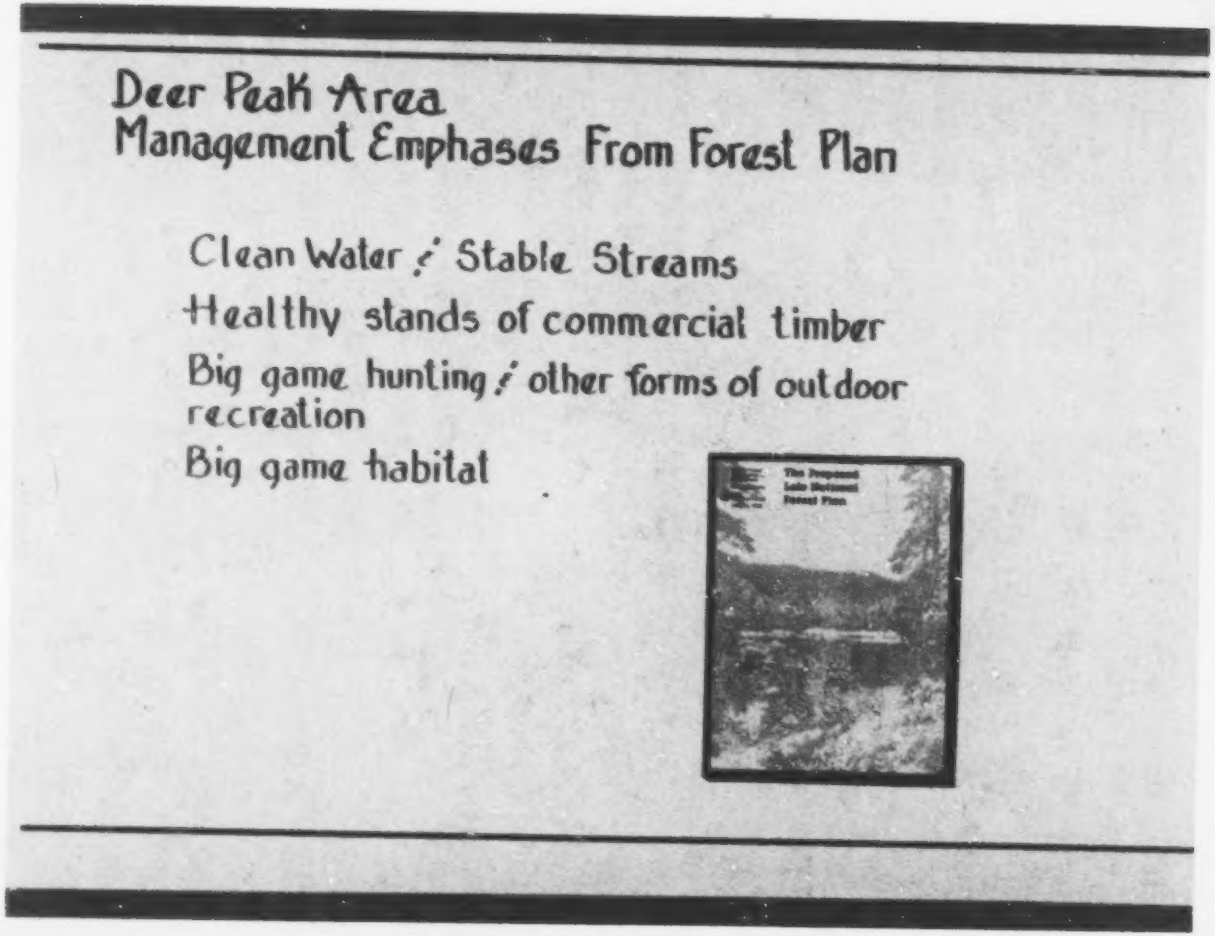
Project Location


Deer Peak Area
Lolo National Forest



Deer Peak Area
Management Emphases From Forest Plan

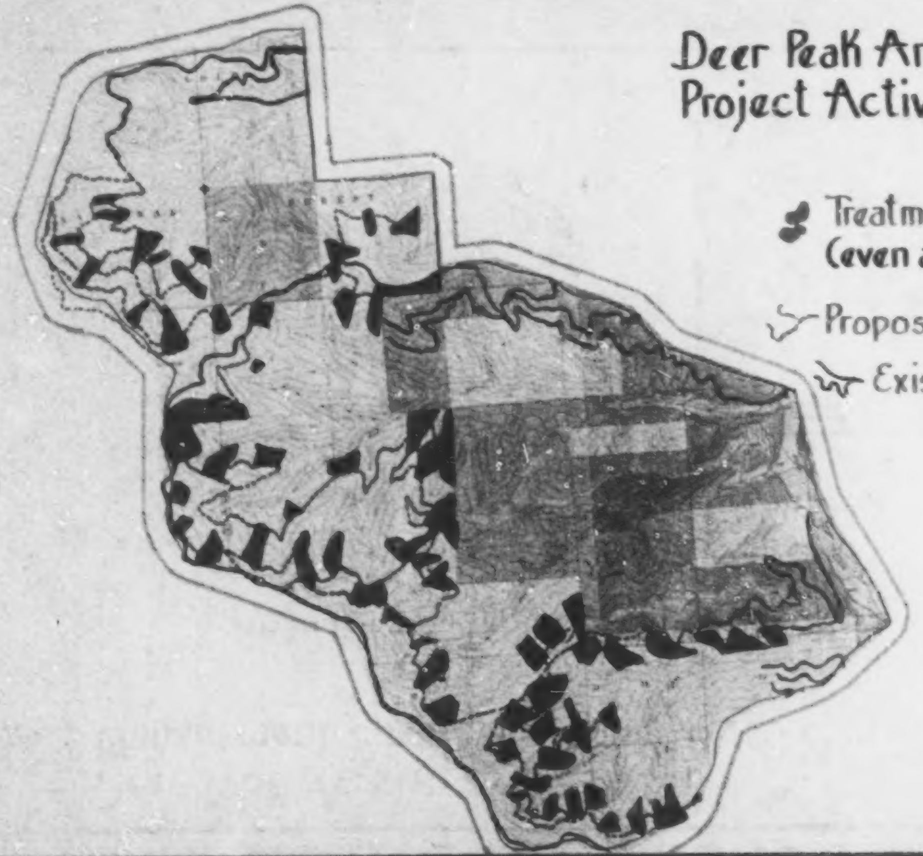
Clean Water & Stable Streams

Healthy stands of commercial timber

Big game hunting & other forms of outdoor recreation

Big game habitat

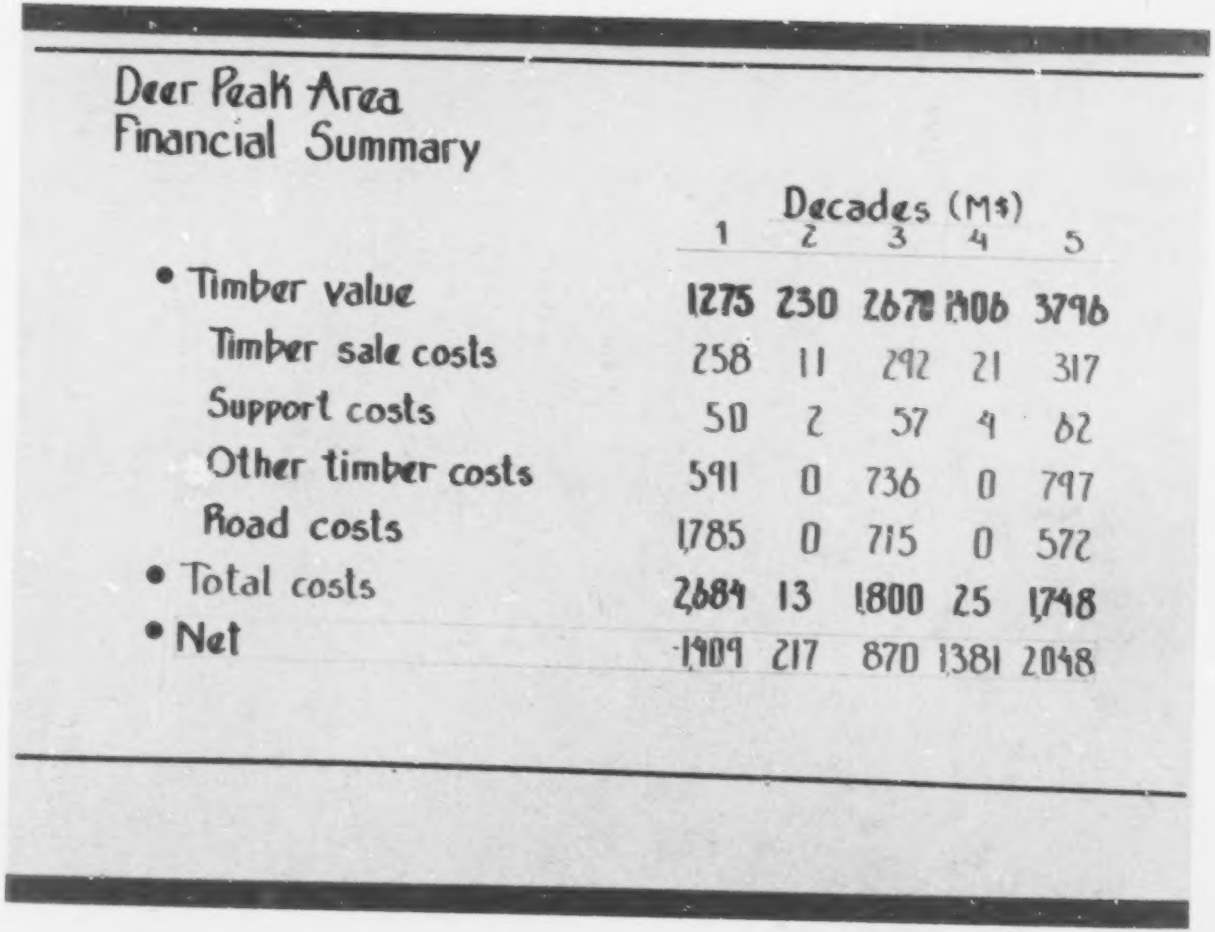
## Deer Peak Area
## Project Activities



Treatment Units
(even aged management)

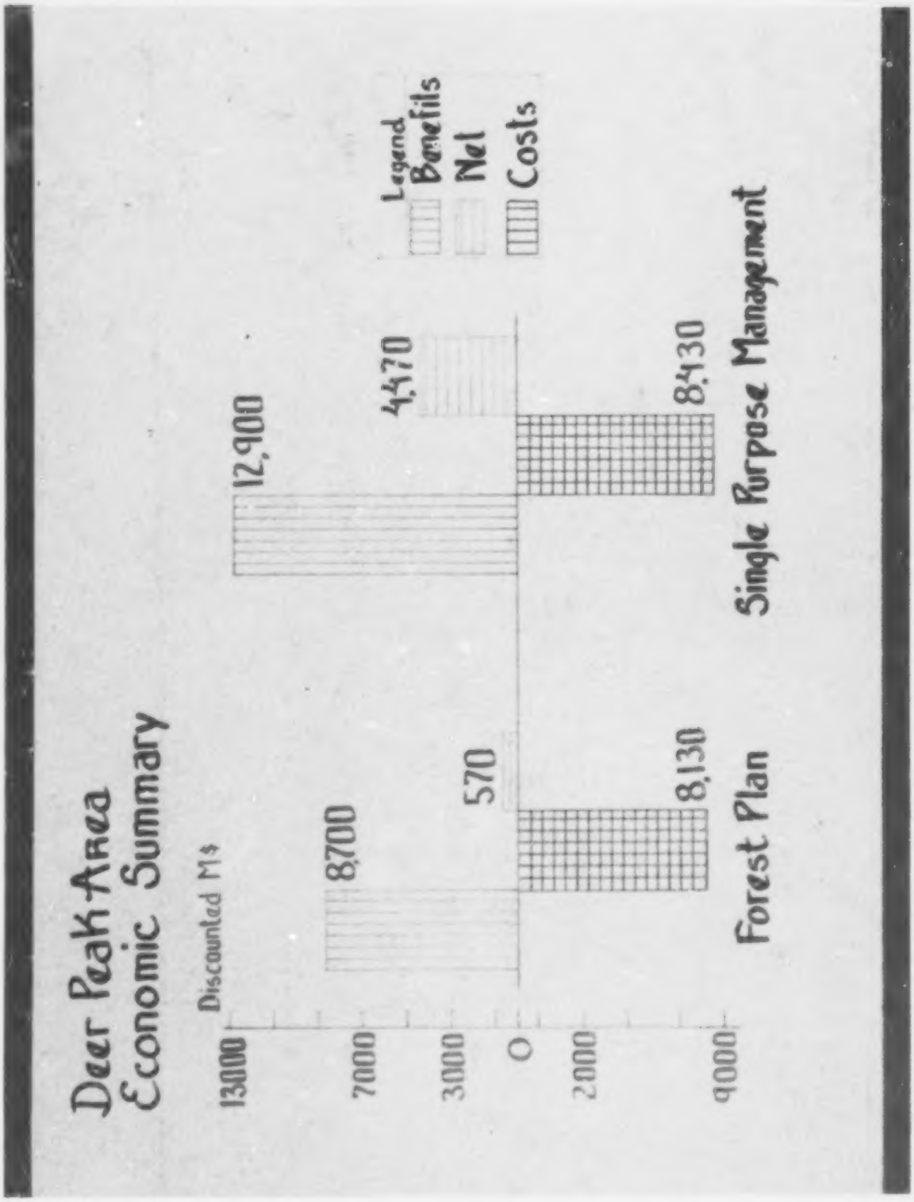
Proposed Roads

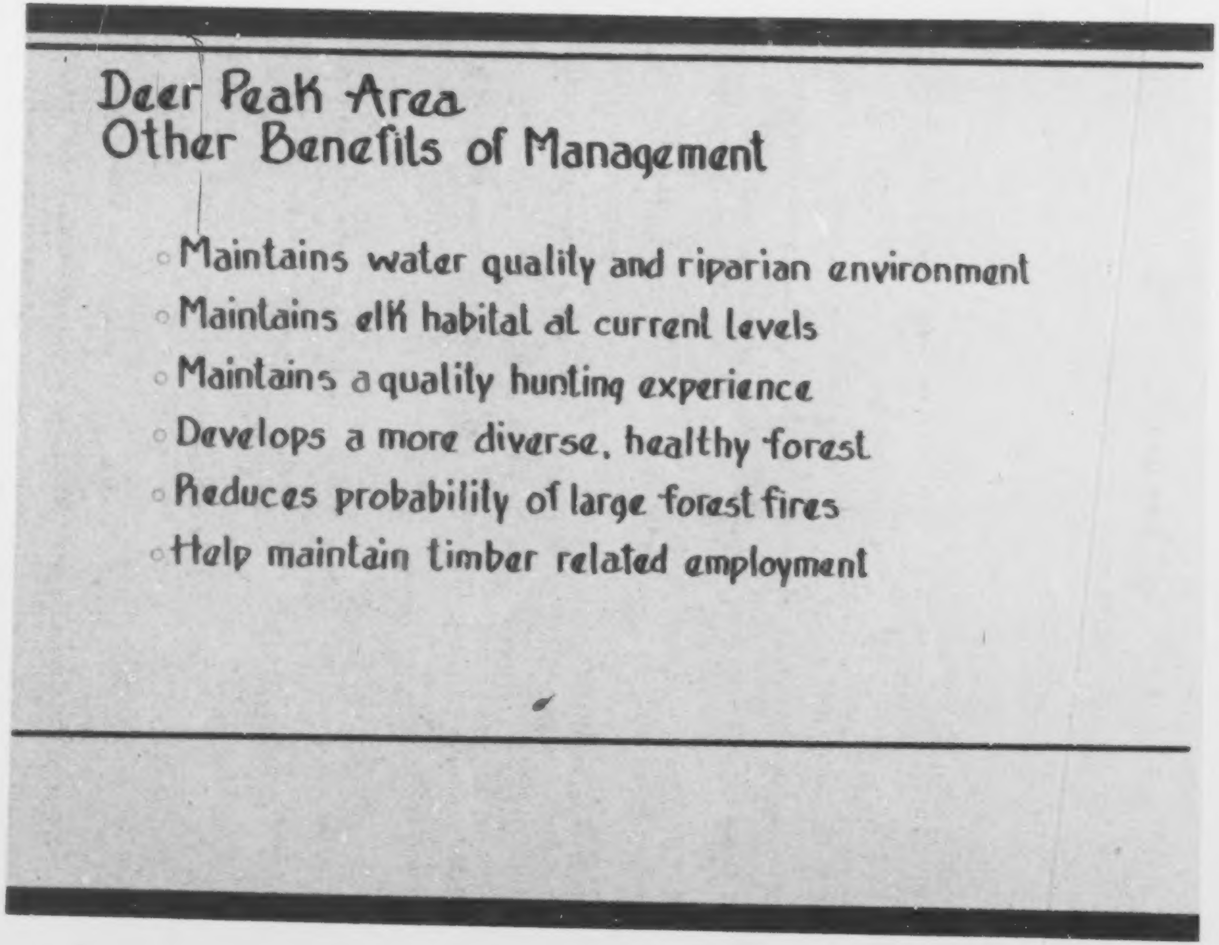
Existing Roads



## Deer Peak Area
## Financial Summary

| | Decades (M$) | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| • Timber value | 1275 | 230 | 2670 | 1,406 | 3796 |
| Timber sale costs | 258 | 11 | 292 | 21 | 317 |
| Support costs | 50 | 2 | 57 | 4 | 62 |
| Other timber costs | 591 | 0 | 736 | 0 | 797 |
| Road costs | 1,785 | 0 | 715 | 0 | 572 |
| • Total costs | 2,684 | 13 | 1,800 | 25 | 1,748 |
| • Net | -1,909 | 217 | 870 | 1381 | 2048 |


Deer Peak Area
Economic Summary
Discounted M$
13000
7000
3000
0
2000
9000
8700
570
8,130
12,900
4,470
8,430
Forest Plan
Single Purpose Management
Legend
Benefits
Net
Costs



## Deer Peak Area
## Other Benefits of Management

- ○ Maintains water quality and riparian environment
- ○ Maintains elk habitat at current levels
- ○ Maintains a quality hunting experience
- ○ Develops a more diverse, healthy forest
- ○ Reduces probability of large forest fires
- ○ Help maintain timber related employment

SCRIPT

## OPHIR MOUNTAIN AREA

## WHITE RIVER NATIONAL FOREST

### BACKGROUND

The Dillon Ranger District of the Arapaho National Forest (NF) is administered by the White River NF. The 350,000 acre district is in Summit County, CO., west of the Continental Divide. Only 70 miles from Denver via Interstate 70, the district is a major recreation area for about 4 million people annually. That is more than nearby Rocky Mountain National Park handles each year.

There are many reasons for the area's popularity. The striking beauty of the Rocky Mountain setting attracts many for sightseeing. In addition, there are four major ski areas, several campgrounds and a popular wilderness for hiking and backpacking. Fishing, along with viewing or hunting deer and elk, are also very popular. And two major reservoirs provide good sailing and other water oriented activities.

The Dillon and Green Mountain Reservoirs were built to provide water through trans-mountain tunnels for an increasingly thirsty Denver and the rest of Colorado's metropolitan Front Range area. Water is a scarce resource in Colorado, and the Dillon District has high value as a watershed.

There is some mining and domestic grazing there, along with a timber sale program that has historically been relatively small. However, these commodity resource values are more than overshadowed by the district's substantial scenic, recreational, watershed and wildlife values. The White River NF's management emphasis for the district reflects this.

In Summit County, almost all the higher elevation acreage is National Forest System (NFS) land. At the lower elevations, private lands are interspersed with NFS lands. To support private development, special uses on NFS lands include major facilities for power, natural gas, water and transportation.

## MANAGEMENT AREA DIRECTION

The White River National Forest's Land and Resource Management Plan classifies the area, which is near an existing downhill ski area, as a potential winter sports site emphasizing cross-country skiing. Specifically, the area is classified 1B, which calls for "integrating potential nordic ski area development and use with other resource management activities to provide healthy tree stands, vegetation diversity, forage production for wildlife, and opportunities for non-motorized recreation (the roads would be closed, with gates or large boulders, to all public motorized use.")

In other words, timber harvests are used to enhance the recreational and visual experience. That would be the case here, as skiers would have a system of openings and roads designed for their use. For instance, long continuous grades would be minimized. Also, skiers would be able to enjoy scenic vistas that had been blocked previously by the dense forest. All this would provide better recreation for Summit County visitors, both by supplying an ideal setting and reducing crowding at other areas. And the other objectives, including a healthy forest, would obviously be met.

## THE MOUNTAIN PINE BEETLE EPIDEMIC

Most of Summit County's present forests were established following extensive logging and fires during the 1800's. Those forests have seen very little man-caused or natural change in this century. Little logging has occurred, and lightning-caused and other wildfires have been suppressed quickly. As a result, the average age of the lodgepole pine trees there is higher than nature would have normally allowed. These 100-130 year old trees are relatively weak and very susceptible to insect and disease attacks.

The mountain pine beetle is a normal part of the lodgepole pine ecosystem, and its population is usually low. However, when such large numbers of trees are susceptible, the beetle population mushrooms into an epidemic. The present outbreak in Summit County began in 1980.

The mountain pine beetle, only the size of a grain of rice, is a very effective killer of trees. The beetles lay eggs under the bark, and the resultant larvae "girdle" the tree as they feed on its nutrient--and water-carrying cambium layer. The larvae also leave behind a fungus that further interrupts the tree's transport system and, once started, the epidemics spread rapidly. Enough mature beetles emerge from each infested tree to attack and kill two to three healthy trees. Such a geometric increase can have devastating consequences, as it has in Summit County and surrounding areas.

Area residents, local elected officials and visitors are concerned over this epidemic. The large numbers of dead and dying trees throughout the area are unsightly and adversely affect private land values. More important, however, is the very real threat of a catastrophic fire, which could be triggered accidentally or by lightning.

Such fires are nature's way of controlling mountain pine beetle epidemics. Large blazes sweep through an infested area, paving the way for natural regeneration of new lodgepole pine trees. The resultant green forest is more vigorous, and if managed more resistant to the beetles, than the forest it replaced. However, large forest fires are simply not acceptable these days as businesses, ski areas, and other development would be endangered.

When considering management alternatives or the area we considered both no action and intensive direct treatment as well as the selected alternative which combines direct treatment with silvicultural treatments. These treatment activities have been prioritized to emphasize protection of the high value private lands and developments in the project area.

The no action alternative would have resulted in Mountain Pine beetle infestations being allowed to run their course. This does not necessarily mean that all of the susceptible trees would be killed by the current infestation. It can be anticipated that the epidemic level would probably continue for seven to ten years. This would be followed by a period of endemic bettle activity which would build to another epidemic. These cycles will recur until the number of susceptible trees have been reduced to a level which will not support epidemic populations of beetles.

It is estimated that 30-40 percent of the susceptible trees would be killed during each cycle. However, as can be seen in similar areas in the country, nearly 100% of the susceptible trees can be killed within a localized area. Thus, as a result of beetle epidemic, a significant amount of the forest area would consist of standing dead trees occurring in pockets of various size throughout the area of susceptible lodgepole pine stands. As time progressed the dead trees would fall to the ground. With the death of these trees the forest canopy would be opened allowing additional light to reach the forest floor. This would result in increased ground vegetation and the development of new stands of lodgepole pine. Eventually these stands would again become susceptible to beetle epidemic unless modified by wildfire or man.

Large areas of dead trees resulting from the pine beetle infestation would severely detract from the beauty of the area. This is a major concern of the local community which is strongly oriented toward tourism and serving recreationists. The scenic beauty of the area is one of its major attractions. The visual impact would also be severe to peolple biking through the area as they would encounter many standing and down dead trees.

The long term fire hazard would be greatly increased with the accumulation of large areas of dead and down trees. Evidence of old burns can be seen throughout Summit County. A conservative estimate is that the increased fuel load would cause fires that are hotter, more destructive and more difficult and costly to suppress. The potential for a catastrophic fire developing is particularly significant in the project area considering its proximity to Breckenridge Ski Area, numerous resort facilities, condominiums and single family homes. The cost of a fire spreading to these areas could easily run into the millions of dollars.

Following the infestations, snags will provide perches and nesting sites for some raptors and cavity nesting birds. Shrubs and understory that develop in openings created by loss of trees provide browse, berries and cover for nesting and foraging birds and ungulates. The herbaceous understory provides additional forage for both domestic and wild ungulates. However, fallen trees may limit their movement and ability to take advantage of the increased forage.

There would be a temporary increase in water yield as a result of reduced evapotranspiration.

There would be little change in recreation activities within the area. However, the quality of the recreation experience would be reduced since people would be encountering many dead and down trees as they hiked through the area. There would not be the appearance of a healthy forest.

The direct treatment alternative would deal only with those trees which are attached annally by the mountain pine beetle. These trees would be removed through removal of commercial salvage sales where feasible. This is the preferred method of direct suppression but it is limited to those areas where existing access and numbers of infested trees make commerical operations practical.

Direct treatment of infested trees with chemicals and other methods is necessary in inaccessible areas and areas where the infested trees are too scattered for commercial salvage.

Direct prevention consists of the applications of a preventative spray to individual, high-value trees. This treatment is limited to high use recreation areas and developed private lands.

The cost of these direct treatment methods can be as high as $14 for each tree. During the epedemic stage of an infestation attacked trees will average 3-5 trees per acre annually over large areas. As can easily be computed the cost of implementing this alternative is overwhelming with little hope of getting to an acceptible long term management situation without high annual management costs.

To respond to the epidemic in a more acceptable manner, USDA's Forest Service, the Colorado State Forest Service and local governments are cooperating in the High Country Project (HCP), which includes Summit County. Under the project, forest management plans to replace older, susceptible trees with new ones are being implemented on private land and the national forest. The aim is to help develop a diverse forest consisting of stands of younger trees that resist beetle attacks, by simulating the effects of fire and bringing the forest to a more "natural" state.

It sould be noted that the Forest Service decided against doing control work in wildernesses, to avoid disrupting their integrity. Also, many steep and remote areas elsewhere are simply too difficult to reach. Because of these and other considerations, work is generally limited to areas that can be managed in the future and those near high-value developments, such as reservoirs, housing subdivisions and ski resorts.

## OPHIR MOUNTAIN-SOUTH AND NORTH BARTON TIMBER SALES

One such high-value area lies west of the Blue River and north of Breckenridge ski area. This area, encompassing 6,800 acres of forested land, contains about 2,000 acres of mature lodgepole pine beetles. In fact, the area contains pockets of infested trees, which will certainly spread if left alone. To stop this, a series of timber sales are planned there.

## SALE AREA MAP

The approach in the Ophir Mountain, South Barton and North Barton timber sales approach would be to harvest a third of the susceptible stands in three entries scheduled 15 years apart. This would allow seedlings to get established in each area before work begins on the next stand, and would encourage aspen sprouting. Thus, at the end of a 30-year period, all of the operable, susceptible forested areas would be regenerated. The roads constructed for the first entry sales would serve to access most of the area for subsequent harvests. They would be closed in the interim periods.

The openings created through cutting these trees would average 15 acres in size. With the help of computer-generated perspective plots, those clearcuts are designed to look like natural openings. Thinning and various types of partial cuts, in which only certain trees are removed from an area, are also used. These silvicultural techniques take place through commercial timber sales and public firewood sales, allowing the trees to be used as boards, firewood and other products.

To buy time while these long-term solutions are being implemented, current beetle populations are being reduced by cutting and treating trees that are presently infested. However, this is a short-term, expensive solution that does not address the basic problem of an unhealthy forest.

## PUBLIC BENEFITS

In preparing for these sales, a series of quantitative analyses was prepared. The results are presented in the attached Appendix A. The series includes a cash flow analysis, discounted cash flow analysis and an economic analysis. The results of the cash flow analysis show that cash flows are negative for the first, second, fourth and fifth decades of the planning horizon. The cash flows are positive for the third decade and the sum of the "out decades" (decades 6 through 15.)

The analysis involving discounted cash flows indicates that discounted costs exceed discounted benefits by $150,037.41. The Present Net Value (PNV) is negative.

The economic analysis which incorporated the non-monetary benefits not included in the cash flow analysis resulted in a positive PNV. The PNV is $121,758.65 when the project is compared the most likely "No Action" scenario.
These results are positive due to the increased water run-off following the timber sale project. Incidentally, a similar analysis for the entire High Country Project, of which these three sales are a part, showed the overall economic efficiency of the HCP is also favorable.

The quantitative analyses prepared for these timber sales consider only the outputs and effects that can be assigned a "monetary" value. These techniques cannot take into account the non-quantifiable aspects of the timber sales.

However, this should not imply that these non-quantifiable effects are not considered in the decisionmaking process. The concept of maximizing net public benefits is relied on, to a great extent, in decisionmaking. Net public benefits are defined as the overall value to the Nation of all benefits less all associated inputs and costs, whether or not they can be quantitatively valued. For example, increased forage in cleacut units would help boost recreation visitor-days, through the creation of more wildlife habitats and therefore more wildlife for viewing and hunting. And, as I mentioned earlier, there would be direct long-term benefits to cross-country skiers. The total increase in all types of recreation would be significant. (Appendix B contains a summary of the non-quantified benefits considered for these sales.)

There are benefits beyond these that are difficult to quantify but have a definite dollar value. For instance, the value of scenic quality: tourists would rather see a green forest than a brown one. This amounts to protecting the national forest's "capital", its long-term value as a visual and commodity resource. Other values are also hard to measure but are undoubtedly very high. How much would be lost in dollars and basic needs if large forest fires, fueled by dry beetle-killed trees, damaged the watershed for Dillon Reservoir and Denver's water supply? What would be the dollar and recreational loss if Breckenridge ski area were destroyed by fire? Damage to homes, and the loss of potential revenue from campgrounds, would also be very high. Of course, there would also be sizeable savings in fire suppression costs if these fires never occurred.

## CONCLUDING REMARKS

Site-specific environmental assessments (EA's) were done for this project. Based on an overall EA for the entire High Country Project, these EA's addressed the specific issues and concerns at each site. Public input was requested and obtained through letters to key individuals, meetings with homeowner associations, news articles and presentations to local planning commissions.

Based on all factors, the Forest Service decided to proceed with the Ophir and North Barton sales. The EA for the South Barton sale is not finished. Meanwhile, some homeowners in the South Barton area have expressed concern over the proposal. However, the Summit County Commissioners and other elected officials have taken the official position that the short-term impacts, which would be mitigated to the fullest extent possible, are greatly outweighed by the long-term benefits.

Meanwhile, efforts conducted in Summit County and elsewhere are working. Direct treatment of trees near Dillon Lake resulted in a 44 percent reduction in the number of infested trees from 1983 to 1984. Although it is difficult to determine how effective the relatively limited long-term efforts have been thus far, they seem certain to succeed. Nearby areas that were cut for other reasons in the past are now vigorous stands of beetle-resistant trees.

## APPENDIX A
## QUANTITATIVE ANALYSIS ON THE OPHIR MOUNTAIN, NORTH BARTON AND SOUTH BARTON TIMBER SALES

This appendix contains the quantitative analysis prepared for the Ophir mountain, North Barton and South Barton timber sales. The analysis is presented in three phases. Phase 1 is a cash flow analysis of the project. Phase 2 is the cash flow analysis of Phase 1 discounted at 4 percent rate. Phase 3 is an economic analysis of the project also discounted at a 4 percent rate.

All analyses consider the existing harvest and one regeneration harvest. A timber benefit value of $40.27 was used. This timber benefit value is based upon a recent White River National Forest study and includes purchaser road credits and K-V. The benefit value for water was $ 48.23, based on the most current (1985) RPA value. All analyses are based on 1984 dollars. For the analyses where water benefits were included, only the benefits for the existing rotation were considered. The costs included in these analyses are depicted in Table 1. The results of each phase of the analyses are presented in the following.

### TABLE 1
### COST CATEGORIES

---

**Timber Sale Costs**

- Timber Planning and Inventory
- Sale Preparation
- Sale Administration
- Silvicultural Exam & Preparation

**Other Timber Costs**

- Reforestation
- Timber Stand Improvement

**Roads**

- Preconstruction & Engineering
- Road Construction
- Supplementation & Contributions
- Road Reconstruction

**Support**

- Cultural - KV
  - Inventory
- Range - KV

PHASE 1 - CASH FLOW ANALYSIS

## TABLE 2

Cash Flow Analysis
Ophir Mountain, North Barton and South Barton Timber Sale
White River National Forest
(Dollars)

| | 1st Decade | 2nd Decade | 3rd Decade | 4th Decade | 5th Decade | 6th - 15th decades |
|---|---|---|---|---|---|---|
| REVENUES | | | | | | |
| Timber | 206584.00 | 5520.00 | 212105.00 | 212105.00 | 10511.00 | 2017420.00 |
| COSTS | | | | | | |
| Timber Sale Costs | 92855.00 | 54570.00 | 13098.00 | 91688.00 | 5221.00 | 463471.00 |
| Support Costs | 43404.00 | 5500.00 | 9500.00 | 9000.00 | 6000.00 | 67000.00 |
| Other Timber Costs | 24681.00 | - | 42681.00 | 103041.00 | - | 123720.00 |
| Road Costs | 206550.00 | 21700.00 | 56200.00 | 74900.00 | 5500.00 | 100500.00 |
| Total Costs | 367490.00 | 81770.00 | 121479.00 | 278629.00 | 16721.00 | 754691.00 |

Table 2 depicts a cash flow analysis of the timber sale project. This table considers only undiscounted revenues and costs. The table indicates that revenues are less than costs in the first, second, fourth and fifth decades of the planning horizón . Revenues exceed costs for the third decade and the "out decades" (decades 6-15).

## PHASE 2 - DISCOUNTED CASH FLOW ANALYSIS

Table 3 depicts the results of discounting the cash flows in Table 2.

### TABLE 3
DISCOUNTED CASH FLOW
(1984 Dollars)

| | |
|---|---|
| Revenues | |
| Timber | 345239.60 |
| Costs | |
| Timber* | 221941.48 |
| Support | 53328.93 |
| Road | 220006.60 |
| Total | 495277.01 |

* Includes timber sale and other timber costs.

Financial Measures:

PNV -150037.41
B/C .70

Table 3 indicates that when revenues and costs are discounted, costs exceed revenues.

## PHASE 3 - ECONOMIC ANALYSIS

This economic analysis differs from the first two phases of this analysis process in that Phase 3 incorporates non-market benefit values. The only quantifiable non-market output for this analysis is water. Water yield increases were calculated using the USDA*WATER.WET computer model.

Tables 4 and 5 indicate the incremental economic measures of the proposed timber sales and the "No Action" alternative over a "base line" condition. The "No Action" alternative is the most likely scenario given that the proposed timber sales are not implemented. The "base line" condition is a hypothetical point for comparison. For the "base line", it is assumed that the land will remain in its current condition into the future. The likelihood of the land remaining in its current condition over time is very remote. However, the "base line" provides a point from which to make comparisons.

TABLE 4

Incremental Analysis of Proposed Timber Sales
Over the "Base Line" Condition
(1984 Dollars)

| | |
|---|---|
| Benefits | |
| Timber | 345240 |
| Water | 329540 |
| Other | 72760 |
| Total | 747540 |
| Costs | |
| Timber* | 221940 |
| Support | 53330 |
| Roads | 220000 |
| Total | 495270 |

* Includes timber sale and other timber costs.

Economic Measures

PNV 252270
B/C 1.51

Table 4 indicates that when an incremental analysis is conducted on the project, the benefits associated with water production cause the project to have a positive PNV. Discounted Benefits exceed discounted costs.

TABLE 5

Incremental Analysis of "No Action"
Over the "Base Line" Condition
(1984 Dollars)

| | |
|---|---|
| **Benefits** | |
| Timber | 0.0 |
| Water | 81920 |
| Total | 81920 |
| **Costs** | |
| Timber* | 0.0 |
| Support** | 183000 |
| Roads | 0.0 |
| Total | 183000 |

* Includes timber sale and other timber costs.
** Costs incurred due to increased fire suppression/prevention.

Economic Measures

PNV -101080
B/C 0.45

Table 5 indicates that the "No action" alternative also has a positive PNV. The water values exceed the cost increases for fire suppression and prevention caused by the increased mortality in the area. However, the PNV is less than PNV for the proposed action.

# APPENDIX B

## SUMMARY OF NON-QUANTIFIED BENEFITS

1. Enhanced recreation opportunities through improved access.
   A. Dispersion of recreationists for a higher quality experience.
   B. Improved Nordic skiing opportunities.
   C. Improved hiking and backpacking opportunities.
   D. Improved hunting opportunities.

2. Improved wildlife habitat.

3. Enhanced visual quality.

4. Reduction in the likelyhood of catastrophic losses from wild fire.
   A. Losses to private land values.
   b. Losses in water quality in municipal watersheds.

5. Increased management opportunities through improved access.

6. Increased opportunities to view scenic areas and wildlife.

## TABLE 1

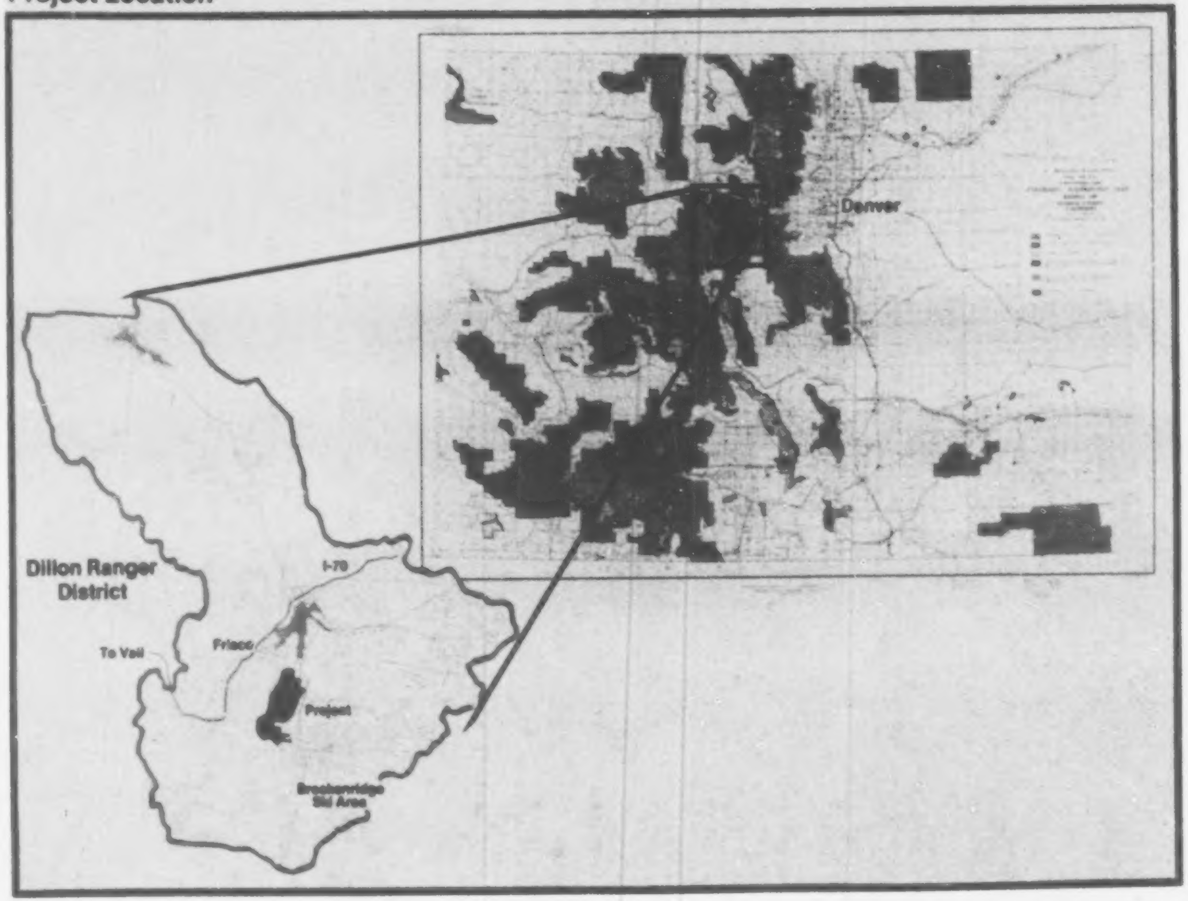
## OUTPUT SUMMARY TABLE

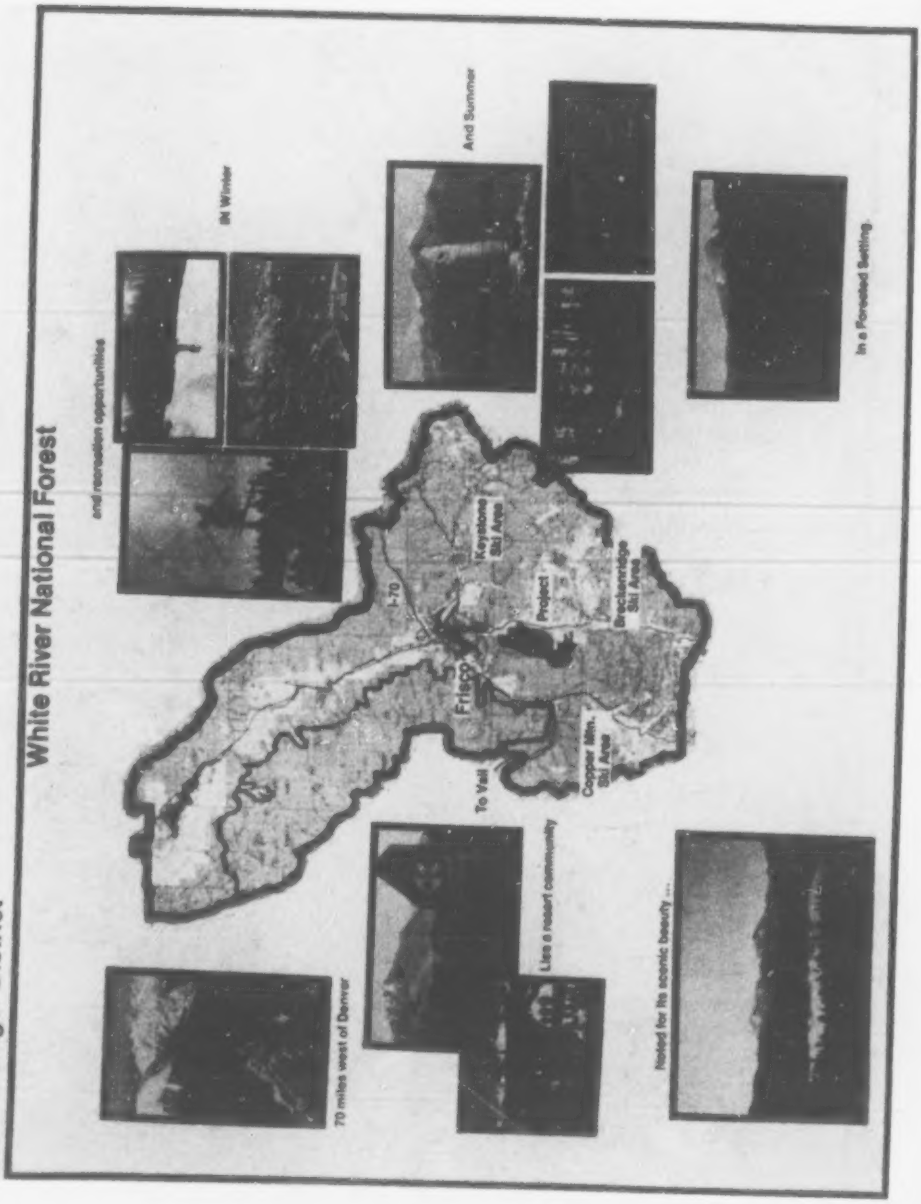
| | 1st Decade* | 2nd Decade | 3rd Decade | 4th Decade | 5th De |
|---|---|---|---|---|---|
| Volume Harvested (MBF) | 5130.00 | 500.00 | 5630.00 | 5630.00 | 262.00 |
| Acres Harvested (Acres) | 653.00 | - | 653.00 | 653.00 | - |
| Forage Increase (AUM)** | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 |
| Recreation Increase | | | | | |
| Hunting (RVD)** | 750.00 | 1220.00 | 1220.00 | 1220.00 | 1220.0 |
| Nordic (RVD)** | 450.00 | 733.00 | 1193.00 | 1193.00 | 1193.0 |
| Other (RVD)** | 188.00 | 306.00 | 500.00 | 812.00 | 812.00 |
| Water Increase Above base line (acre feet)** | 327.00 | 215.00 | 478.00 | 501.00 | 522.00 |

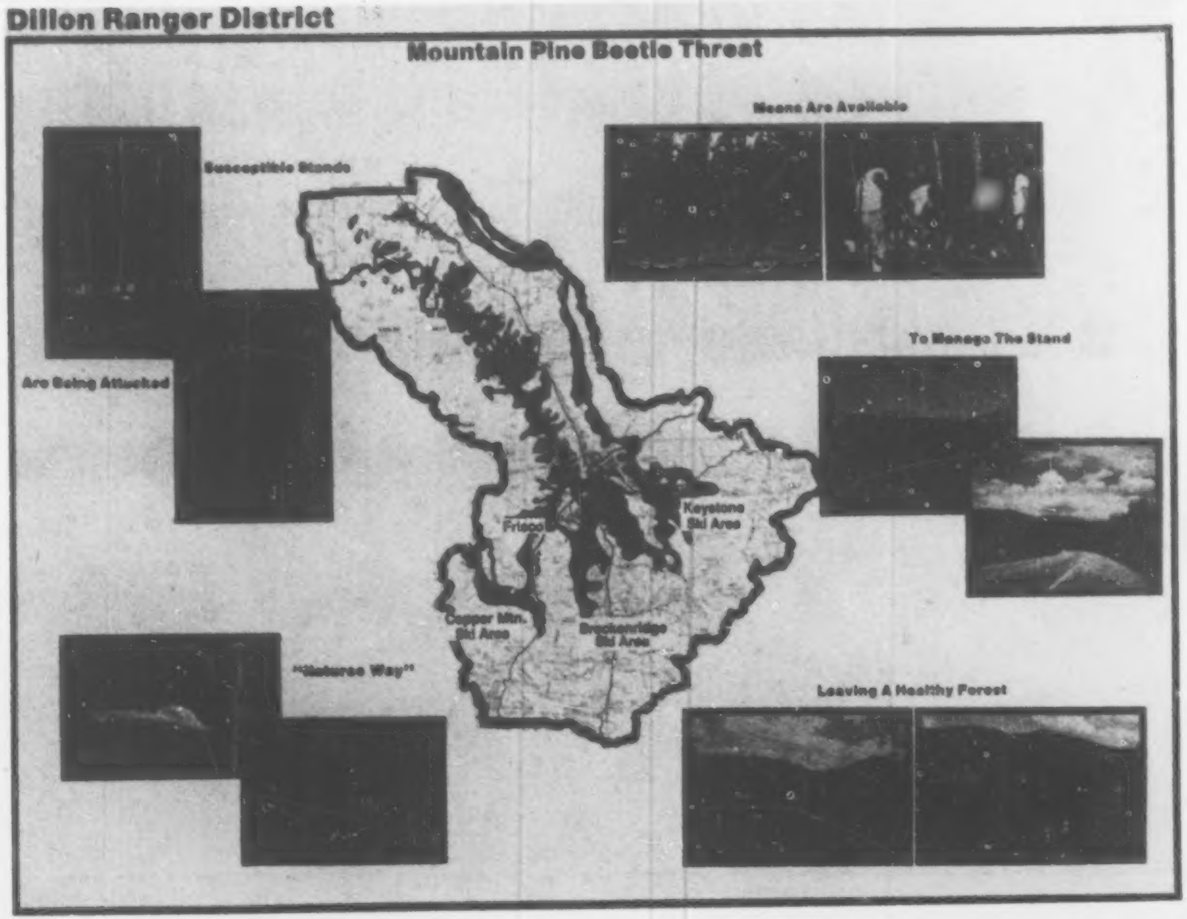
* Average annual outputs begin the first year of the sale (1985).

** Average annual outputs.

Project Location


Denver
Dillon Ranger District
I-70
To Vail
Frisco
Project
Breckenridge Ski Area


Dillon Ranger District
White River National Forest
70 miles west of Denver
Like a resort community
Noted for its scenic beauty ...
and recreation opportunities
In Winter
And Summer
In a Forested Setting.
I-70
To Vail
Frisco
Keystone Ski Area
Project
Breckenridge Ski Area
Copper Mtn. Ski Area


Dillon Ranger District
Mountain Pine Beetle Threat
Susceptible Stands
Are Being Attacked
Means Are Available
To Manage The Stand
Leaving A Healthy Forest
"Natures Way"
Frisco
Keystone Ski Area
Copper Mtn. Ski Area
Breckenridge Ski Area

## Ophir Mountain Area

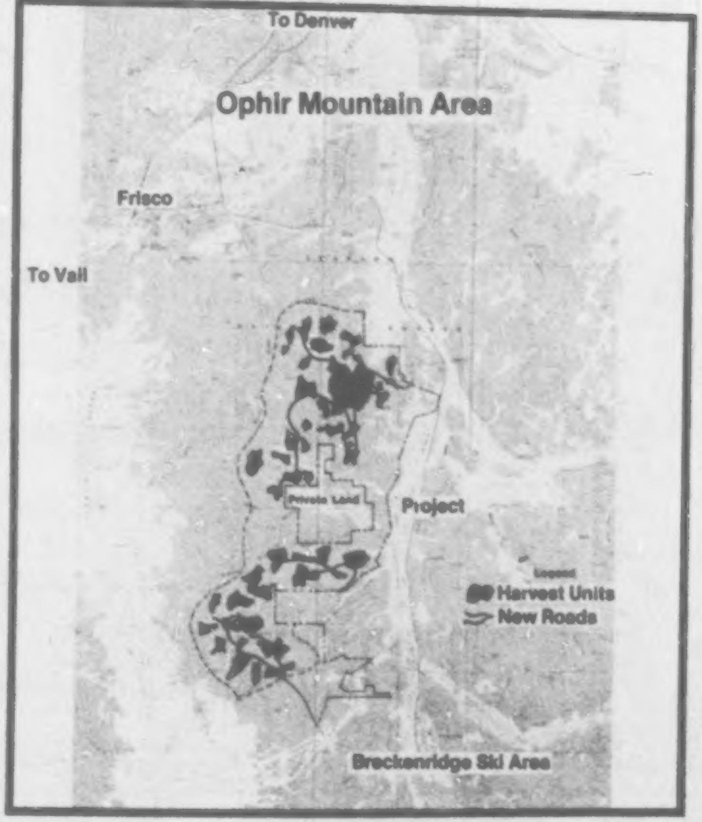
**Management Emphasis From The Forest Plan**

- Downhill Skiing
- Nordic Skiing
- Dispersed Recreation - fishing, camping, hiking
- Scenic Quality
- Water Production
- Achieve A Healthy Forest

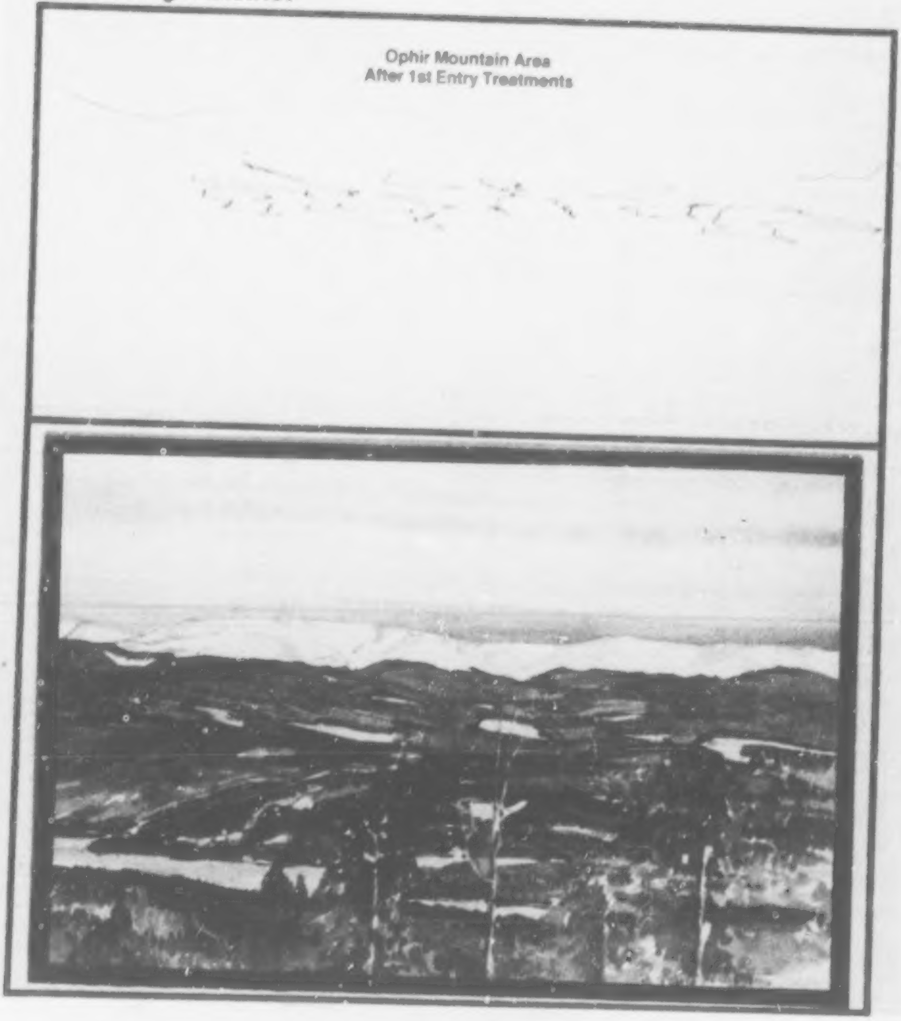
LAND AND
RESOURCE
MANAGEMENT
PLAN

White River
National Forest

Dillon Ranger District


To Denver
Ophir Mountain Area
Frisco
To Vail
Private Land
Project
Legend
Harvest Units
New Roads
Breckenridge Ski Area

## Dillon Ranger District



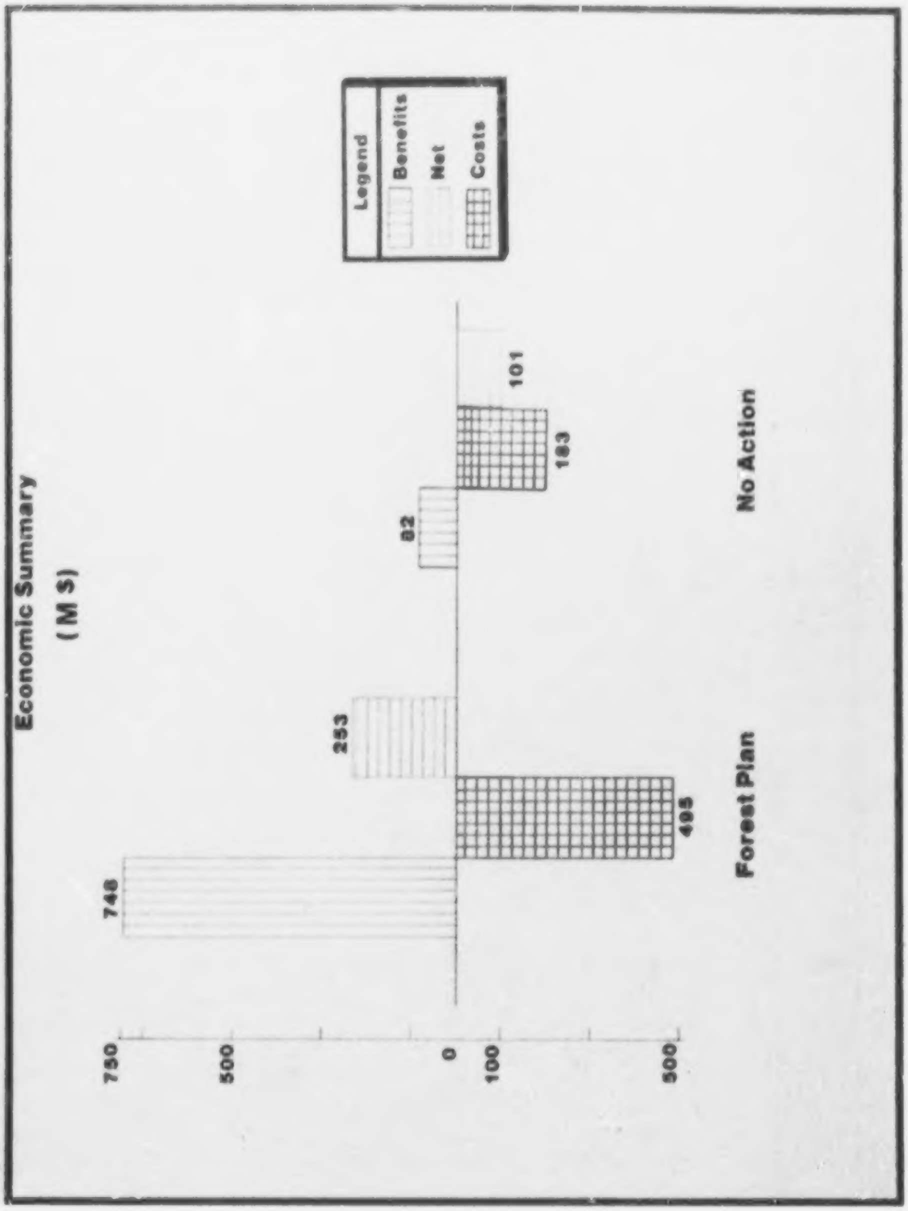
Ophir Mountain Area
After 1st Entry Treatments

## Ophir Mountain Area

### Financial Summary
### (M $)

| | Decade | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| **Timber Value** | 207 | 6 | 212 | 212 | 11 |
| Timber Costs | 93 | 55 | 13 | 92 | 5 |
| Support Costs | 43 | 6 | 10 | 9 | 6 |
| Other Timber Costs | 25 | 0 | 43 | 103 | 0 |
| Road Costs | 207 | 22 | 56 | 75 | 6 |
| **Total Costs** | 368 | 83 | 122 | 279 | 17 |
| **Net** | −161 | −77 | +90 | −67 | −6 |

Ophir Mountain Area



**Ophir Mountain Area**

## Effects

| Forest Plan | No Action |
|---|---|
| • Increased Nordic Skiing | • No Increase in Nordic Skiing |
| • Increased Hiking & Camping | • No Increase in Hiking & Camping |
| • Enhanced Scenic Quality | • Loss of Scenic Quality |
| • Increased Water Production | • Increased Water Production |
| • Maintenance of Water Quality | • Potential loss of Water Quality |
| • Reduced Risk for Forest Fires | • Increased Risk for Catastrophic Forest Fire |
| • Improved Wildlife Habitat | • Improved Wildlife Habitat |
| • A Healthy Forest<br>-Improved diversity of vegetation | • An Unhealthy Forest<br>- Maintain Uniformity of Vegetation |

### OREGON AND CALIFORNIA GRANT LANDS

The CHAIRMAN. Thank you very much.

Although this is a budget hearing, there is no question that we sometimes get diverted toward policies that are not totally related to budgets, and that's inevitably the case. I'll try, although I have a great deal of interest in some of these other issues, to confine at least the major portion of my own attention to those things that bear upon budgetary expenditures.

I noted in your budget that one of those items that you had zeroed out is the amount of money that was necessary for the administration of the O&C lands on your chart. It was zero in the prior year and you have added in that amount. Is there a corresponding reduction in the BLM budget, a dollar-for-dollar difference?

Mr. PETERSON. That's exact. We just transferred their budget request over to our budget.

The CHAIRMAN. You didn't analyze or develop your own budget request?

Mr. PETERSON. No.

The CHAIRMAN. You just took their analysis, their experience, and their budget request?

Mr. PETERSON. Right. That's correct. I guess properly it's the allowance from OMB after BLM made their proposal.

The CHAIRMAN. Well, as I understand, there's about a $5 million difference between the two figures as developed by the BLM and as presented to us by you. What does that indicate?

Mr. PETERSON. It represents a couple of things. It represents the 5-percent pay reduction, which is reflected in all budgets. It also reflects administrative savings that are being reflected across the Government, some general reduction in administrative costs.

The CHAIRMAN. It does not in any way reflect any proposed programmatic change?

Mr. PETERSON. Oh, yes. There are some reductions in investments and so on as part of that $5 million.

The CHAIRMAN. What investments are you referring to?

Mr. PETERSON. I believe there are some reductions in road maintenance. We'll have to provide that to you, but there are some programmatic reductions in the neighborhood of, I think, about $3 million.

### PAYMENTS TO STATES

The CHAIRMAN. Mr. MacCleery, you have indicated that indeed you want to change the cost-sharing or receipt-sharing with the counties. That's as old as the hills upon which you operate. I am a little disturbed that this administration has fallen for that this year.

We fought for years to restore what was, we believed, the rightful share of the States in regard to these receipts. That was the promise and the commitment made when the Forest Preserves were created by a great Republican President, Teddy Roosevelt, and was observed for some years and then observed more in the breach, than in the observance, to the point where you had managed in the Federal Government to take away all of the States' money by loading more and more of the costs on the timber sales, the costs of management.

That's certainly a big issue today. But I, for one, am not going to welcome the opportunity of going back down the road that we went down once before. Did the administration looked at that history, the political history of the relationships of the Federal Government and the States on this issue, before they made that proposal?

Mr. MacCleery. Well, as you mentioned, there is a long history behind the current receipts-sharing formula. There has been discussion over the years many times as to whether the 25-percent receipts in the present form equitably compensates the counties for the burden of providing services as a result of the Federal lands, while at the same time being equitable to the taxpayers who are required to finance indirectly the 25-percent receipts by forgoing revenues that otherwise would go into the Treasury.

Several years ago, a study was done which in quite a bit of depth looked at this, and came to the conclusion that 25-percent receipts-sharing that occurred at that time, before 1976, did not compensate the counties in a direct measure to what those lands would be taxed if they were in private ownership. One of the objectives of payments to States was to compensate, sort of a payments in lieu of taxes revenue-sharing, States or the counties so they would not be burdened by the Federal lands.

The study showed that certain counties received less than they would have received if the lands were in private ownership. Other counties received more. Last year we published a proposal that never came in the form of legislation, to base county receipts on a tax equivalency basis. This proposal was published for public comment. We got quite a bit of interest in it, a lot of opposition. Some counties were in favor of it. They would be advantaged by going in that direction.

We did a study which showed how it would affect certain counties in a whole broad cross-section of types of counties. The study showed that the proposal was not inequitable. At least not as inequitable, in my view, as what originally had been suspected by some counties.

That evolved to the present proposal, which would reduce the receipts upon which 25 percent was deducted to a net basis rather than a gross basis. The feeling is that the current situation, in many cases, overcompensates the counties and States as compared with what they would get if those lands were in private ownership.

The Chairman. Are you sending that proposal to us in legislative form? When can we expect that?

Mr. MacCleery. We are working on the details, and should be sending forward a proposal within 4 to 6 weeks.

The Chairman. Will we have the opportunity to consult with you on that before you send the proposal up?

Mr. MacCleery. We certainly can sit down with you beforehand and talk to you about the elements of the proposal.

The Chairman. Mr. MacCleery, your budget shows a total request for the State share of receipts of $32 million, as compared to $238.8 million for 1985—one-seventh of what it had been. What is the proposal based on? Is it the cost of administering the timber programs, or all the costs associated with managing the lands on which the timber program is administered?

Mr. MACCLEERY. It is based on deducting the costs of timber production and others.

The CHAIRMAN. And other what?

Mr. MACCLEERY. Other costs such as fire protection.

The CHAIRMAN. What's the basis for suggesting that when the law says to share the receipts of timber sales that you should deduct all of the costs of administration, ignoring the other values on the lands and the other reasons for administering those lands?

Mr. MACCLEERY. As I said, this is a proposal to make the compensation more comparable to what the counties would receive if the lands were in private ownership.

The CHAIRMAN. It has no relation, then, to current law?

Mr. MACCLEERY. Current law would need to be changed.

The CHAIRMAN. That's another way of saying it has nothing to do with current law. It is an entirely new proposal based upon an entirely new theory.

Mr. MACCLEERY. It's a new proposal; that's correct.

### OUT-YEAR TIME RECEIPTS

The CHAIRMAN. Mr. Peterson, you show certain timber receipts over the next year from timber sales. As you would know, although the housing industry has had its ups and downs over the last several years, due primarily to the extremely high interest rates that we experienced in this country starting in the late 1970's and peaking in 1980, the housing industry went down and as they did the timber industry went down.

We had a good housing year last year, at over 1.7 million housing starts in the Nation. That's a pretty good year by almost any test, isn't it?

Mr. PETERSON. That's correct, yes.

The CHAIRMAN. Yet the timber industry in the United States did not recover; isn't that correct?

Mr. PETERSON. Yes. Particularly in the West it did not recover.

The CHAIRMAN. If indeed they did not recover that was partly at least, and maybe wholly, many think, because of the increased share of the lumber market enjoyed by timber production in Canada, and increased imports. Canada increased their share from around 25 percent of the gross market in this country to nearly 35 percent of the gross share; is that not correct?

Mr. PETERSON. That's correct, yes, sir.

The CHAIRMAN. Now is your projection of receipts for next year based upon a more normal pattern of production and consumption, or is it based upon what we are experiencing now with the flood of imports from Canada?

Mr. PETERSON. Our projection is based on some moderation of that.

The CHAIRMAN. What's going to bring that about?

Mr. PETERSON. Well, two things, I think. As you remember, in the West, raw material prices for timber products, the stumpage prices and the raw material price were quite high last year, with all that large volume of timber under contract at very high prices.

Raw material prices have moderated substantially and will moderate further by 1986 because that large amount of high-priced timber under contract, much of that, will be turned back.

The CHAIRMAN. And you are going to get new contracts out? They'll bid on new contracts at lower prices and move that to the market?

Mr. PETERSON. Right.

The CHAIRMAN. How do those stumpage prices compare to stumpage prices in Canada?

Mr. PETERSON. We really can't make a direct comparison because in the Canadian system they're in kind of the developmental business. The companies have very long-term contracts. They pay a fixed amount. They also build all the roads, put in all the facilities, and in some cases do the reforestation.

The CHAIRMAN. The government does?

Mr. PETERSON. No, the companies themselves.

The CHAIRMAN. The timber companies?

Mr. PETERSON. Yes, although in many cases the Federal or provincial government does reforestation. Then the transportation costs are entirely different in Canada. Much of it is rail transportation.

The International Trade Commission did or analysis of the difference in cost between the United States and Canada. I think it's fair to say that during the time the economy was down the Canadian companies, simply to stay alive, reduced prices rather dramatically. In other words, all of the companies in the United States and Canada, were selling in a decreasing market and timber export is by far the leading export of Canada. It's bigger than the next two combined.

The CHAIRMAN. That is the reason I asked the question. Is the estimate of receipts from sales on national forests, a realistic estimate, in the face of the conditions we now see? The Canadian dollar is 25 to 30 percent below the United States, or we're 25 to 30 percent above them, whichever way you wish to state the percentage, and that gives them a tremendous leverage in our marketplace.

Mr. PETERSON. OK. Let me tell you a couple of hopeful things I see happening, and realize I don't have a crystal ball. One of the reasons that Canada has come into the U.S. market very strongly is because international markets have been way down. There is now some recovery in the whole international economic picture as it relates to things like timber products.

Japan is recovering now on their housing, as is Korea and China. The whole Pacific Rim is picking up now, and that area is also one of Canada's markets. So, I think as we see a more normal economic situation in the world in general, Canada will begin serving that larger market, which it had served to a large degree, and will moderate some of its activity in the U.S. market.

The CHAIRMAN. Will that increase the price for lumber on the international market?

Mr. PETERSON. Yes, It will slightly increase the price.

The CHAIRMAN. Are we seeing then that the Canadians are dumping in our markets as they lose others?

Mr. PETERSON. It's really trying to sell where the markets are. Let me point out that I think in the Pacific Northwest that the future of the Pacific Northwest is going to involve a substantial amount of international trade from the United States to Pacific Rim countries, as you know, which is already happening.

In other words, the historical serving of the eastern markets by the Pacific Northwest is likely not to rebound to its previous levels simply because the Eastern timberlands have recovered from their cut-over situation earlier in this century and they are much closer to the markets in the East, and so is Canada.

So the Pacific Northwest is looking to a large extent to international markets and are being quite active in those markets. We think the net result of this is a probable timber harvest of about 11.2 next year.

The CHAIRMAN. What was the harvest level last year, or is it this year? That's a better way to put it.

Mr. PETERSON. We expect about 10 this year. What's happened really is the harvest went up from 8 to 10. It picked up in response to this changed market. But, prices of lumber didn't pick up very well, so that accounts for an economic problem still in the West. Prices didn't rebound, because of pressure, I believe, from not only Canada but other U.S. firms.

So, we believe that our estimates for 1986 are probably about right.

The CHAIRMAN. A further 10-percent increase in harvest?

Mr. PETERSON. Right. But I would admit that if the dollar continues to gain against Canadian currency, that that's not going to be helpful.

The CHAIRMAN. Thank you very much.

Senator Bingaman.

### FS/BLM INTERCHANGE

Senator BINGAMAN. Thank you, Mr. Chairman.

Let me ask a couple of questions on the interchange issue that you testified about. When we held our hearing with Secretary Hodel he was talking about this dual-hatting concept that's going forward. Could you describe your understanding of what that involves?

Mr. PETERSON. Yes, I'll be glad to. I think there's two ways that we might use double-hatting. For example, during this period that we are awaiting congressional action, that's the period we're talking about, we may have a wildlife biologist retire. In the same town there may be a BLM wildlife biologist. We will double-hat that person to do work on the national forest land, too. In other words, they could do work on both kinds of lands. The same thing could be with the range conservations. The only reason we're using the word double-hat is because when he crosses on to those different lands, he has to be doing the work under the rules and requirements of the agency responsible for that land.

Much of the technical work performed by both agencies is the same. But this allows a person to exercise some responsibility, if needed, by wearing the double hat. It does not change jurisdiction of the land.

If there was an appeal from a decision made by that person and it involved something happening on public land administered by BLM, that would be handled immediately within the Department of Interior's system chain for handling appeals. This is purely a way to get work done at the local level while we're waiting for Congress to act and to prevent us moving people.

We don't want to ask somebody to move to a location, take their family and buy a house, and find out 6 months later that they don't have a job there because we've combined the office.

The other kind of double-hatting is that if we combine offices we frequently share a receptionist or share somebody doing purchasing. But, if somebody is doing purchasing they have to wear a BLM hat when they're spending BLM money, and Forest Service hat when they are spending Forest Service money, because of the delegations of purchasing authority.

Senator BINGAMAN. I gather you are comfortable that you can administer this double-hatting arrangement in a clear and accountable fashion. Is that correct?

Mr. PETERSON. We have done this at several locations over time. It's not something we like to do for a long period of time. It's merely a way to develop some slack while Congress is acting. We think it's a responsible way to develop the slack because we want to handle the reductions in people through attrition.

If we just went ahead and filled jobs and kept everything full until Congress acted, then we would be faced with making some immediate changes that would be quite disruptive to people. I can imagine some of our people saying you just moved me here 6 months ago, and now you're asking me to move again.

The CHAIRMAN. Would the Senator yield on that question?

Senator BINGAMAN. Certainly.

The CHAIRMAN. Do you have legal authority now under existing law to do the double-hatting you are contemplating, or does it require a change in law or Executive order?

Mr. PETERSON. It does not require a change of law or an Executive order. It's done under the Economy Act and other authorities, and we'd be happy to give you a copy of the joint opinion of the Solicitor of Interior and the General Counsel of Agriculture.

The CHAIRMAN. If you would do so, we'd like to have that and we'll make it a part of the record.

Mr. PETERSON. OK, we'll do it.

The CHAIRMAN. I am informed we have that already, but it will be made a part of the record at this point.

[The information follows:]

United States
Department of
Agriculture

Office of
General
Counsel

Washington
D C
20250

MEMORANDUM

| | | |
|---|---|---|
| TO : | The Secretary<br>U.S. Department of Agriculture | The Secretary<br>U.S. Department of the Interior |
| FROM : | Daniel Oliver<br>General Counsel<br>U.S. Department of Agriculture | Frank K. Richardson<br>Solicitor<br>U.S. Department of the Interior |

SUBJECT: Land Management Authorities of the Forest Service and the Bureau of Land Management

The Departments of Agriculture and of the Interior have under consideration a proposal to assist each other in the management of certain of their respective lands (hereafter interchange) and subsequently transfer the management of certain lands administered by the Bureau of Land Management (BLM) and the Forest Service. We understand that the purpose of the proposal is to reduce the extent of intermingled lands by providing more unified areas for management by a single agency resulting in better service to the public, more efficient management, and reduced costs.

We have been asked for advice on the available methods to implement the proposal under existing law. As used in this opinion, the word "interchange" refers to a process and arrangement by which one agency's personnel will manage the lands of the other, but subject to the laws, rules and regulations for the respective lands which will remain unchanged. The term "transfer" refers to a transfer of land from one status to another with a concomitant change in the administering agency (e.g., National Forest System lands to public lands managed by the BLM).

The issues involved have been examined by both the Office of the General Counsel of the Department of Agriculture and the Office of the Solicitor of the Department of the Interior. This opinion is the joint opinion of these offices.

We have considered the following methods of implementing your proposal:

1. The transfer of land management authorities and functions by delegation from one Secretary to the other.

2. The transfer of lands from one Department to the other.

3. The interchange of agency personnel.

Our conclusions, which are explained below, are:

1. Since Congress has plenary power over federal lands under the Constitution, and has granted authorities with respect to specific lands to the Secretary of the Interior and to the Secretary of Agriculture, these authorities may not be transferred or delegated outside the respective Departments without specific statutory authorization.

2. There are two authorities which allow the transfer of some lands from one Department to the other. These are section 204 of the Federal Land Policy and Management Act and section 32 of the Bankhead-Jones Farm Tenant Act.

3. The proposal may be implemented in part by appropriate interchange of personnel between the agencies.

I. Transfer of authorities and functions from one Department to another.

A. General authorities to manage the federal lands.

The plenary power to prescribe the management of the federal lands rests with Congress. The Property Clause of the Constitution provides that, "Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States." U.S. Const., art. IV, § 3, cl. 2. The power of Congress over the federal lands is virtually without limitation, *Kleppe v. New Mexico*, 426 U.S. 529 (1976); *United States v. Brown*, 552 F.2d 817 (8th Cir. 1977); *United States v. Lindsey*, 595 F.2d 5 (9th Cir. 1979).

Congress has delegated substantial administrative authority over *specific* lands to the Secretary of the Interior and the Secretary of Agriculture, respectively. The provisions of the Federal Land Policy and Management Act (FLPMA), 43 U.S.C. 1701 *et seq.*, constitute the principal authority under which the Secretary of the Interior manages the public lands. Likewise, the Secretary of Agriculture administers under various authorities lands reserved from the public domain as components of the National Forest System. *See Generally*: Organic Administration Act of 1897, 16 U.S.C. 551; Multiple-Use Sustained-Yield Act, 16 U.S.C. 528; and the National Forest Management Act, 16 U.S.C. 1600.

It is important to note that these authorities of the Secretaries are specific to the particular lands Congress has given them to administer. For example, the Secretary of Agriculture is charged with the responsibility to:

> . . . make provisions for the protection against destruction by fire and depradations upon the *public forests and national forests* which may have been set aside or which may be hereafter set aside . . . and he may make such rules and regulations and establish such service as will insure the objects of such reservations . . . . 16 U.S.C. 551, (emphasis added).

Concomitantly, the Secretary of the Interior is vested with management authority over the public lands under the provisions of FLPMA. Public lands are defined as:

> . . . any land and interest in land owned by the United States . . . and administered by the Secretary of the Interior through the Bureau of Land Management . . . . 43 U.S.C. 1702(e).

B. Delegation of administrative authority within a department.

Having been granted broad authorities by Congress to manage federal lands, the question is how far and to what extent each Secretary can delegate his authorities? It has long been recognized that some delegation of authority is necessary if the mandate of the law is to be carried out. Despite some early court decisions which generally constrained the amount of authority which could be subdelegated, Cudahy Packing Co. v. Holland, 315 U.S. 357 (1942), current law allows greater secretarial delegations so long as the delegations are not contrary to the specific provisions of a statute. See: EEOC v. Raymond Metal Products Co., 530 F.2d 590 (4th Cir. 1976); Wirtz v. Atlantic States Construction Co., 357 F.2d 442 (5th Cir. 1966).

Congress has also recognized the need to authorize the cabinet heads and others the powers to delegate authority. The President is granted broad powers of delegation at 3 U.S.C. 301, as are heads of executive departments at 5 U.S.C. 301. The fact that Congress may not have specifically granted delegation powers does not mean they do not exist. As noted in Hall v. Marshall:

> While the legality of a subdelegation of an agency's power is primarily a function of legislative intent, the omission of any specific grant of power to delegate should not be construed as a denial of that power. [citations omitted] 476 F. Supp. 262, 272 (1979).

Likewise, in Wirtz v. Atlantic States Construction, supra, the court stated:

> Unless . . . the statutory agency is hemmed in, the "administrative flexibility necessary for prompt and expeditious action on a multitude of fronts," [citation omitted] points in the direction of more, not less, delegation. To argue for nondelegability in those situations in which Congress has not spoken explicitly and thereby insist upon personal performance by the Executive . . . envisages many unsatisfactory results. 357 F.2d 442, 445 (1966).

This line of cases points to the usual administrative situation where an agency official is carrying out direct delegations from a superior. By and large, such delegations are solely to subordinates of the official to whom the power was expressly granted by Congress.

C. Statutory limitations on powers to delegate land management functions.

Case law, supra, supports the proposition that the principal limitation on the power of delegation is congressional intent. Congress does not always clearly state whether certain powers are intended to be delegated. However, in the various acts authorizing reorganizations of both the Departments of Agriculture and the Interior, there is a prohibition against delegating powers from one Department to another.

In Reorganization Plan No. 3 of 1950 (64 Stat. 1262), all powers of agencies within the Department of the Interior are specifically vested in the Secretary of the Interior for delegation in accordance with the Reorganization Plan. Section 2 of the Plan provides:

> The Secretary of the Interior may from time to time make such provisions as he shall deem appropriate authorizing the performance by any other officer, or by any agency or employee, of the Department of the Interior of any function of the Secretary, including any function transferred to the Secretary by the provisions of this reorganization plan. 5 U.S.C. Appendix at 1046 (1982 edition), (emphasis added).

Thus, while broad powers were vested in the Secretary of the Interior by Reorganization Plan No. 3, they could only be delegated to employees or agencies within the Department of the Interior. This proviso would preclude any general delegation of the powers of the Secretary of the Interior to the Forest Service, an agency of another department.

The same limitations apply to the Secretary of Agriculture. In Reorganization Plan No. 2 of 1953 (67 Stat. 633), all powers of agencies within the Department of Agriculture were vested in the Secretary of Agriculture who could, in turn, redelegate those powers in accordance with section 4 of the Plan. Section 4 provides:

> The Secretary of Agriculture may from time to time make such provisions as he shall deem appropriate authorizing the performance by any other officer, or by any agency or employee, of the Department of Agriculture of any function of the Secretary, including any function transferred to the Secretary by the provisions of this reorganization plan. 5 U.S.C. Appendix at 1069 (1982 edition), (emphasis added).

For purposes of delegation, a Secretary or agency head cannot delegate that which he did not receive from the Congress; he cannot delegate greater authority than Congress gave him; and, most important to the present situation, he may only delegate to those individuals whom Congress has granted him authority to do so. Under the respective reorganization plans of the Departments of Agriculture and the Interior, the Secretaries received broad delegation authority, but only within their respective departments.

There are other reasons why it is legally impermissible to delegate administrative authority between the Secretaries of the Interior and Agriculture. The general laws governing federal land management indicate that Congress does not intend delegation in the administration of the public lands or National Forest System lands outside the respective departments. In section 103(e) of FLPMA, "public lands" are defined to mean "any land and interest in land owned by the United States . . . administered by the Secretary of the Interior through the Bureau of Land Management . . . ." (Emphasis added.) The public lands are identified and their statutory status or basis is established by reference to the administering Secretary and agency. If the Secretary of the Interior delegates his authority to administer such lands, or any portion thereof, to an agency other than the Bureau of Land Management, those lands may lose their status as public lands. The delegation would, in effect, have transferred the lands to another executive department without complying with the statutory mechanism for transferring jurisdiction over federal lands provided by Congress in section 204 of the FLPMA. If the public lands, through delegation, are being administered by the Secretary of Agriculture through the Forest Service, they become National Forest System lands pursuant to section 11 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended (RPA, as amended), see infra.

The same result is true for land administered by the Forest Service. The RPA, as amended, defines the National Forest System to include:

> All national forest lands reserved or withdrawn from the public domain of the United States, all national forest lands acquired through purchase, exchange, donation, or other means, the national grasslands and land utilization projects administered under Title III of the Bankhead-Jones Farm Tenant Act . . . and other lands, waters, or interests therein which are administered by the Forest Service or are designated for administration through the Forest Service as part of the system." 16 U.S.C. 1609(a), (emphasis added).

As in the case of public lands, some National Forest System lands have attained this status because they are identified by the administering agency, i.e., the Forest Service. If the Forest Service's authority to administer such lands is delegated to another agency, the lands may no longer be National Forest System lands.[1] If by delegation any lands are administered by the Bureau of Land Management, by reason of the definition in the FLPMA, they may have become public lands.

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[1] If a delegation includes any National Forest System lands reserved or withdrawn from public domain, it can be contended that such lands have become public lands in contravention of the expressed prohibition in the RPA, as amended, that "no land now or hereafter reserved or withdrawn from the public domain as national forests . . . shall be returned to the public domain except by an act of Congress." 16 U.S.C. 1609(a).

Congress has chosen to provide land status, which identifies the body of laws applicable to the federal lands, by reference to the administering Secretary and agency. This practice has created a legal barrier to the delegation of authority between the Secretaries of the Interior and Agriculture.

II. Statutes authorizing the interdepartmental transfer of certain lands.

While the authority to transfer lands from one department to another cannot be implied, there are two statutes which would permit partial interdepartmental transfers: section 32 of the Bankhead-Jones Farm Tenant Act and section 204 of the FLPMA. Once land is transferred under either of these authorities, the lands assume the status appropriate to the administering agency. Other statutes were examined for possible authority to effect a transfer of lands, but all had prohibitions or limitations. These include the Organic Administration Act of 1897 for the national forests;[2] the FLPMA, section 307(b);[3] and the Act of August 28, 1937.[4]

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[2] Under the Organic Administration Act of 1897, the Secretary of Agriculture is authorized to :

> . . . make provisions for the protection against destruction by fire and depradations upon the public forests and national forests which may have been set aside . . . and he may make such rules and regulations and establish such service as will insure the objects of such reservations . . . . 16 U.S.C. 551.

The verb phrases allowing the Secretary to "make provisions" and "establish such service" might be variously construed to empower the Secretary of Agriculture to vest some of his authorities in agencies other than the Forest Service. We do not, however, find this a persuasive interpretation of this 88 year old statute because its principal purpose has always been to give the Secretary regulatory authority over national forests. The Forest Service has been established since 1905 and the Congress has ratified that yearly by appropriations and otherwise. Further, even if there were implicit authorization to transfer authority in the Organic Act, it may have been negated by Reorganization Plan No. 3 of 1953.

[3] Section 307(b) of FLPMA provides:

> Subject to the provisions of applicable law, the Secretary may enter in contracts and cooperative agreements involving the management, protection, and sale of the public lands. 43 U.S.C. 1727(b).

While Congress did not intend section 307(b) of FLPMA to be used to transfer administrative jurisdiction over lands, this section does permit the Secretary to enter into "cooperative agreements" for the management of the "public lands." Section 307 was primarily a reenactment in FLPMA of the provisions of section 102 of the Public Land Administration Act of 1960 (43 U.S.C. 1363). See: Senate Rpt. No. 94-563, 94th Cong., 1st Sess.,

(Footnote Continued)

A. The Bankhead-Jones Farm Tenant Act.

Title III of the Bankhead-Jones Farm Tenant Act of July 22, 1937 (7 U.S.C. 1010 et seq.) provides that the Secretary of Agriculture establish a program for the retirement, rehabilitation, and use of submarginal and other lands not primarily suited for cultivation. Section 32 of the Act granted the Secretary of Agriculture broad authorities to implement the statutory purposes including the acquisition and disposal of lands (referred to as "Title III lands"):

> [The Secretary is authorized] . . . (c) to sell, exchange, lease, or otherwise dispose of, with or without a consideration, any property so acquired, under such terms and conditions as he deems will

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(Footnote Continued)
p. 55. By its own terms, the Public Land Administration Act only applied to federal lands administered by the Bureau of Land Management. Public Law 86-649, § 2. Further, its legislative history indicated that the principal purpose was to extend certain authorities in the Taylor Grazing Act to all other lands admiistered by BLM. See: Senate Rpt. No. 1755, reprinted in [1960] U.S. Code Cong. & Admin. News, 3147. There is no indication in the 1960 Act, or in the reenactment of the same provisions in section 307 of FLPMA, that Congress intended an expansive use of cooperative agreements to transfer or delegate administrative powers over the public lands to another agency.

[4] The Act of August 28, 1937, is codified at 43 U.S.C. 1181b and provides the Secretary of the Interior with broad powers to enter into cooperative agreements with other agencies on the Oregon and California Railroad and Coos Bay Wagon Road Grant Lands (O&C Lands):

> The Secretary of the Interior is authorized, in his discretion, to make cooperative agreements with other Federal or State forest administrative agencies or with private forest owners or operators for the coordinated administration, with respect to time, rate, method of cutting, and sustained yield, of forest units comprising parts of revested or reconveyed lands, together with lands in private ownership or under the administration of other public agencies, when by such agreements he may be aided in accomplishing the purposes mentioned in . . . . this title. 43 U.S.C. 1181b.

While this statute provides broad powers to enter into cooperative agreements, there is no authority to transfer administrative powers over these public lands. The objective appears to be to allow for cooperative agreements which will permit more cooperative and consistent management of the O&C lands in conjunction with other public and private lands in the area. While this statute is certainly supportive of an interdepartmental agreement, it does not go any further than the Economy Act as far as authorizing the transfer of management functions. (See, Part III-A, infra, for a full discussion of the Economy Act, 31 U.S.C. 1535.)

> best accomplish the purposes of this subchapter, but any sale, exchange, or grant shall be made only to public authorities and agencies and only on condition that the property is used for public purposes . . . . The Secretary may recommend to the President other Federal, State, or Territorial agencies to administer such property, together with the conditions of use and administration which will best serve the purposes of a land-conservation and land-utilization program, and the President is authorized to transfer such property to such agencies. 7 U.S.C. 1011(c), (emphasis added).

It is clear that Title III lands administered by the Forest Service as National Grasslands, land utilization projects, or otherwise can and have been transferred by the President to the Secretary of the Interior for management by the Bureau of Land Management. See: E.O. 10787; Nov. 6, 1958.

A Comptroller General's Decision dated September 3, 1958, addressed the transfer of over 2,186,000 acres of Title III lands from the Secretary of Agriculture to the Secretary of the Interior under the authority of section 32(c) of the Bankhead-Jones Farm Tenant Act (7 U.S.C. 1011(c)). The conditions of the transfer were that the land be administered under the provisions of the Taylor Grazing Act and the general land management authority of the Secretary of the Interior. However, the proposed transfer provided that 25% of the net revenues received by the Secretary of the Interior from grazing and other uses of the transferred lands would continue to be paid to the counties in which such lands are located as provided in section 33 of the Bankhead-Jones Farm Tenant Act. These payments would be in lieu of the payments to the States or counties specified in section 10 of the Taylor Grazing Act (43 U.S.C. 315). Regarding the Secretary of the Interior's question as to whether such conditions could apply to the transferred land, the Comptroller General stated:

> In view of . . . [the Secretary of Agriculture's authority at 7 U.S.C. 1011(c)], there can be no doubt of the legal authority of the Department of the Interior to use and administer the transferred lands on the basis and under the conditions set forth . . . [by the Secretary of Agriculture]. Accordingly, you are advised that we will not be required to object to the transfer of the lands in question to your Department, upon recommendation of the Secretary of Agriculture and approval of the President, for use and administration under the provisions of the Taylor Grazing Act, as amended, or other land management statutes, but retaining the revenue distribution provisions of section 33 of the Bankhead-Jones Farm Tenant Act. 38 Comp. Gen. 180 [B-136065, September 3, 1958].

We conclude that the Bankhead-Jones Farm Tenant Act does provide broad authority for the President to transfer Title III lands to the administration of the Bureau of Land Management under such terms and conditions as the Secretary of Agriculture may prescribe. Subject to such terms and conditions, lands transferred to the Bureau of Land Management would be managed under the provisions of the FLPMA and other applicable law. See: E.O. 10787, supra.

B. Federal Land Policy and Management Act, sections 103(j), 204(c).

The withdrawal provisions of the FLPMA provide authority for the Secretary of the Interior to transfer lands to the administration of another agency. Section 103(j) of FLPMA defines "withdrawal" in terms of withholding an area of land from settlement, sale, location, or entry under some or all of the public land laws, and as:

> . . . transferring jurisdiction over an area of Federal land, other than 'property' governed by the Federal Property and Administrative Services Act, as amended . . . from one department, bureau or agency to another department, bureau or agency. 43 U.S.C. 1702(j), (emphasis added).

The procedures governing withdrawals are enumerated in section 204 of FLPMA. In accordance with subsection (c) of that section, a detailed report would have to be made to the Congress and public hearings held.

While section 204 of FLPMA empowers the Secretary of the Interior to transfer public lands to the Department of Agriculture for administration, the only concomitant authority in the Secretary of Agriculture to transfer National Forest System lands to the Department of the Interior are lands specifically acquired under Title III of the Bankhead-Jones Farm Tenant Act. Lands reserved from the public domain as national forests are not within the ambit of Title III lands. Accordingly, while some Title III lands might be available for transfer, the Bankhead-Jones Farm Tenant Act would not provide sufficient authority to achieve the full purposes of transferring or interchanging lands between the agencies. One additional factor to consider with regard to section 204 withdrawals is its extensive provisions for congressional oversight and approval and the resultant constitutional issues. I.N.S. v. Chadha, ____ U.S. ____, 103 S. Ct. 2764 (1983).

III. Interchange of agency personnel.

The purposes of consolidating land management functions between agencies might be achieved by the interchange of the personnel of the two concerned departments.

There are three ways to achieve the aims of the jurisdictional interchange of management responsibilities currently under consideration. All three are directed towards personnel changes in the respective agencies (leaving the administration of the land with the agency to which Congress originally delegated the responsibility for its management) and not the actual transfer of statutory and regulatory authority from one agency to another. The approaches are as follows.

A. The Economy Act.

Broad authority for agencies to enter into agreements to secure goods or services from other agencies is provided by the Economy Act.[5]

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[5] The Economy Act was initially passed by the 72d Congress as Part II of H.R. 11267, "Legislative Branch Appropriations Act for Fiscal Year 1933," on June 30, 1932, Ch. 314, 47 Stat. 417. Section 601(a) of the Economy Act, codified at 31 U.S.C. 686, has been amended repeatedly. However, most of the operative language has been retained. On September 13, 1982, Congress passed Pub. L. No. 97-258 which repealed 31 U.S.C. 686 and reenacted a similar but streamlined provision at 31 U.S.C. 1535, which continues to be referred to as the "Economy Act" and was most recently amended by Pub. L. No. 98-216 on February 14, 1984. References in this memorandum to legislative history and Comptroller General Opinions generally relate to earlier versions of the Act, i.e., 31 U.S.C. 686, but are relevant to the current, similar provisions at 31 U.S.C. 1535.

§ 1535. Agency agreements

(a) The head of an agency or major organizational unit within an agency may place an order with a major organizational unit within the same agency or another agency for goods or services if --

(1) amounts are available;

(2) the head of the ordering agency or unit decides the order is in the best interest of the United States Government;

(3) the agency or unit to fill the order is able to provide (or get by contract) the ordered goods or services; and

(4) the head of the agency decides ordered goods or services cannot be provided (by contract) as conveniently or as cheaply by a commercial enterprise.

(b) Payment shall be made promptly by check on the written request of the agency or unit filling the order. . . .

(c) A condition or limitation applicable to amounts for procurement of an agency or unit placing an order or making a contract under this section applies to the placing of the order or the making of the contract.

(d) An order placed or agreement made under this section obligates an appropriation of the ordering agency or unit. The amount obligated is deobligated to the extent that the agency or unit filling the order has not incurred obligations, before the end of the period of availability of the appropriation, in --

(Footnote Continued)

Numerous published and unpublished opinions of the Comptroller General have interpreted the Economy Act. The legislative history and applicable Comptroller General and judicial opinions generally support a broad interpretation of the Act. Further, interagency agreements affecting a diverse range of subject matter have been approved, particularly when such agreements are designed to realize savings to the Government as a whole.

In *United States v. Red Feather*, 392 F. Supp. 916, 923 (D.S.D. 1975), the court stated that "through the enactment of the Economy Act of 1932. . . Congress has provided *extremely broad authorization* for any executive department or independent establishment to place orders with any other willing department for materials, supplies, equipment, work, or service." (Emphasis added.) Quoting a 1932 House Report of the 72d Congress, the court characterized the legislative purpose as follows, "[a] free interchange of work . . . will enable all bureaus and activities of the Government to be utilized to their fullest and in many cases make it unnecessary for departments to set up duplicating and overlapping activities of their own . . . ."

The Comptroller General, in a decision at 59 Comp. Gen. 366, 367 (1980) states that "section 601 of the Economy Act . . . was enacted to permit Government agencies to contract with other agencies for the purchase and sale of needed supplies and employee services. It was contemplated that economies would be realized if agencies utilized the available resources and expertise of other agencies." Similarly, the decision at 57 Comp. Gen. 674, 681 (1978) notes that the "Economy Act's overall goal is to effect economy in the Government as a whole." In reviewing the legislative history of the Act, the Comptroller General cites at 678 the following testimony by the sponsor of an earlier, similar bill:

> *The purpose of this legislation is to permit the utilization of facilities and personnel belonging to one department by another department* or establishment and to exact a simple and uniform procedure for effecting the appropriations adjustments involved.

It is believed to be the the policy of Congress, as evidenced in

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(Footnote Continued)

(1) providing goods or services; or

(2) making an authorized contract with another person to provide the requested goods or services.

(e) This section does not --

(1) authorize orders to be placed for goods or services to be provided by convict labor; or

(2) affect other laws about working funds.

> various provisions of the different appropriation acts, that *whenever possible departments and establishments should make use of personnel and facilities of other departments or establishments*. (Emphasis added.)

While the purpose of the Economy Act has been broadly interpreted, certain restrictions have been recognized. For instance, interagency agreements cannot be employed by an agency as a vehicle to delegate its administrative functions to another agency. In an unpublished decision issued on April 3, 1981 (B-200309-O.M.), the Comptroller General discussed this restriction as follows:

> Concerning interagency agreements for the performance of administrative functions, we have consistently held that [the Economy Act] cannot be used by an agency to delegate or transfer statutory duties vested in it to another agency. See 52 Comp. Gen. 128, 132 (1972); B-117604-O.M., dated June 30, 1970; B-156010-O.M., dated March 16, 1965; B-45488, dated November 11, 1944; and A-70486, dated March 18, 1936. This interpretation is based upon the principle that, inherent in a congressional grant of authority to a department, agency, or head thereof, to perform an administrative function and to expend moneys in the course of performing that function is a responsibility that may not be transferred in the absence of Congress. Such a transfer has been disallowed, for example, if it would have required the requisitioned agency to take actions that would have been final and conclusive upon all officials of the United States, thereby completely divesting the requisitioning agency of its duties and responsibilities with respect to that administrative function. However, where the requisitioning agency has retained ultimate responsibility for the function, the agreement was not considered a transfer of an administrative function.

The requisitioning agency remains accountable to Congress for activities under appropriations made to it. An interagency agreement for the exchange of services therefore must allocate final responsibility for the services rendered to the requisitioning agency.

Additional prerequisites to valid interagency agreements are expressly provided by statute. 31 U.S.C. § 1535(a) requires the head of the agency ordering the supplies or services to determine first that the order "is in the best interest of the United States Government" and that the services "cannot be provided as conveniently or cheaply by a commercial enterprise." Further, amounts must be available to reimburse the agency providing the services. However, a specific appropriation for interdepartmental agreements is not required. (49 Comp. Gen. 585, 586) In the Comptroller General decisions addressing interagency agreements, reimbursement disputes are common. Accordingly, any interagency agreement for the exchange of services should delineate reimbursement provisions with particularity.

B. Detail of personnel.

The employees who would be involved with the management of the sister agency lands may be detailed on a reimbursable basis to that agency. The authority for these details is the Economy Act, supra. Employees on such details could continue to carry on the duties of their original agency as well as the duties of the agency to which they would be detailed. For example, in a given area that contains both public land and Forest Service lands that, after the interchange, are to be wholly managed by the Forest Service, BLM employees would be detailed to the Forest Service and would work in the Forest Service office which manages the land in question. They would, however, be able to carry on their original duties under their original BLM employment. Thus, when administering the public lands within the now Forest Service area of responsibility, they would do so as BLM employees. If they were working on the management of the Forest Service lands, they would do so as employees detailed to the Forest Service.

Under this approach, neither Secretary is delegating his constitutionally delegated authority to his sister agency. His employees are working for, or on behalf of, the sister agency. A number of administrative and personnel steps would have to be taken to implement this option including financial reimbursement, a description for each employee as to the areas of responsibility, etc. As to the number of employees who would require detailing, the number may not be quite as numerous as first thought. Only those employees originally employed by one agency who would actually be doing the work under the laws of their sister agency would require detailing. For example, any BLM employees who would continue to work exclusively with BLM statutes administering BLM law and reporting to BLM supervisors would not be required to be detailed.

A normal detail is a temporary full-time assignment to a specific position in a receiving agency. While some of the details envisioned by this proposal fit the normal concept, others will be, in effect, part-time details. These will include various combinations of time and positions. Such part-time details are not common, but are within the authority granted by the Economy Act, 31 U.S.C. 1535. We also note that the classification rules of the Office of Personnel Management require classification of a position to which an employee is detailed for more than 120 days. Federal Personnel Manual, Chapter 511, subchapter 1-6b (1969).

The Office of Personnel Management has not issued any rules on interdepartmental details, Federal Personnel Manual, Chapter 300, subchapter 8-2 (1981), thereby effectively leaving policy formulation on such details to each agency. Should any employees be detailed in this program, Agriculture and Interior policies and procedures on the details are applicable. See, e.g., 370 DM 300, Interior (requiring Secretarial approval for details over 90 days). These departmental policies and procedures should be reviewed in light of this proposal and amended where necessary.

In summary, through the Economy Act, employees of each agency may be detailed to the other agency on a combination of full and/or part-time bases, so long as the pay and classification rules of the Office of Personnel Management, the detail rules of each agency, and proper financial accounting procedures under the various appropriation acts are followed.

C. Part-time appointment by both agencies.

A third possibility would be to appoint those individuals who would be administering their sister agency's land under their sister agency's rules and regulations to part-time positions in both agencies. The limitation on such an action relates to compensation in that an employee cannot be paid for more than forty hours of work. Such an approach has a host of practical problems, including the nature of appointment, financial payments and reimbursement from one agency to the other, but the point is that such an arrangement is legally permissible.

IV. Conclusions.

While the precise limits are unclear on the powers of delegation by the Secretaries of Agriculture and the Interior, we conclude that Congress has directed, through various statutes that federal lands be generally administered only by the Department given the authority by Congress. Accordingly, the law would not permit a transfer of general administrative functions between Departments. Stated differently, the Forest Service and the Bureau of Land Management cannot administratively transfer jurisdiction over lands under their respective management unless specifically allowed for by statute such as section 204 of FLPMA or section 32 of the Bankhead-Jones Farm Tenant Act.

While delegation by each Secretary to the other is not permissible, the aim of the proposal may be achieved by an interchange of personnel between the departments. Any such personnel arrangements providing for the exchange of services cannot affect basic authority over the lands, nor can it remove the agency's responsibility to administer a given piece of land in accordance with the laws, rules and regulations applicable to that land.

Senator **Bingaman**. I gather there are a few of these sort of non-irrevocable actions that are contemplated until Congress acts on the issue. Are there any actions that you think this committee could profit from knowing about before they occur or at the time they occur?

I'm just thinking in terms of being able to respond to inquiries and concerns that are expressed in our home States. I think we asked Secretary Hodel if he could give us notice whenever there are changes that are taking place of an administrative nature that we might hear about.

Mr. **Peterson**. The implementation guides are being developed now, and they will be available about the first of June. Essentially there won't be anything happening before then, except a very few places where we might just defer a lease or something. If we defer a lease or something specific, generally we would advise you of that.

Senator **Bingaman**. But we can be assured that you will advise us of anything along those lines?

Mr. **Peterson**. Well, major things. You would not want us to tell you that we have double hatted a wildlife biologist, I don't think.

Senator **Bingaman**. I agree.

Mr. **Peterson**. But if we take a major action, we will ask our field to be sure you are advised. When we get those plans the first of June we will lay those out and they will be pretty specific as to what's going to happen.

There will be a series of public consultations and meetings in the next few months that will provide a great deal of information.

Senator **Bingaman**. Do you have the schedule of those public meetings or hearings at this time?

Mr. **Peterson**. No; what we've done is ask the Forest Service regional foresters and State directors of BLM to set them up. If there is a major organization, for example, already having a meeting, they might add this issue, rather than to schedule it separately. That information will be available in the next few days.

Senator **Bingaman**. And you will advise the committee as to those hearing dates or meeting dates; is that accurate?

Mr. **Peterson**. We'd like to do that on an individual basis. If we gave you all that information all over the country, it would be a big stack of paper.

Senator **Bingaman**. I am particularly interested in New Mexico and whatever meetings you are going to have in New Mexico on this subject.

Mr. **Peterson**. We will provide you with that.

Senator **Bingaman**. OK. And I assume the rest of the committee members are interested in their respective States.

## RECREATION USER FEES

Let me ask you about this. You say on page 5 of a budget summary that I have been given—I guess this was prepared by the committee majority staff—but an estimated $25 million additional revenues are anticipated from increases in recreational user fees. Legislation will be proposed at a later date in addition to the language proposed in the Interior appropriations request.

Could you be a little more specific—could you give me more information on what kind of fees you would anticipate, the amount of those fees, any studies that you might have as to what the imposition of those fees would do to the number of people using some of these recreational facilities?

Mr. **MacCleery**. Last year we sent forward a piece of legislation which would have increased user fees in areas such as developed sites or campgrounds, and boating facilities. This legislation would have given us authority to increase the fees charged for specific campsites and other developed sites. The $25 million is in anticipation that that legislation would move forward and be passed.

We're also looking at other options for user fees, such as a more general kind of fee for, for example, a statutorily designated area, a national recreation area, wilderness areas, and these kinds of things. We have not gotten to the point where we are prepared to propose anything along those lines.

The $25 million is in anticipation that the legislation that we sent forward last year would be acted upon. Right now we have certain constraints over being able to charge any fees at all in some sites. If water isn't provided or some other kinds of amenities aren't provided, we don't have authority to charge anything, even though there is a substantial investment that the public has put out there.

For example, we don't have authority to charge for the use of boat ramps unless they are motorized, and the authority we sent forward would be to provide for fees for these kinds of sites. With the funding the receipts generated would go into a fund that would be used to improve and maintain recreational facilities on the national forest system.

Senator **Bingaman**. Do you have anything in the way of a study or an estimate as to the reduction in the use of these facilities that would result from the imposition of fees?

Mr. **MacCleery**. It's our view that the amount of the fees that we are talking about are not large enough to really affect the use appreciably.

Senator **Bingaman**. So you don't anticipate any reduction in usage?

Mr. **MacCleery**. There may be some, but in our view, it's not going to be significant.

Senator **Bingaman**. Let me ask on the point that the chairman was asking about. When you move from a sharing of gross receipts to a sharing of net receipts with the States and start deducting those costs, do you have a State-by-State breakdown as to this $167 million that you're going to pick up that used to be going to the States. I would like to know how much of that is coming from each State?

Mr. **MacCleery**. I don't believe we do. We're in the process of, as I mentioned, putting together the details of this, and it may be that once we work through how we put this together and what the legislation would look like the numbers may change somewhat. When we do have a more definitive analysis of this, we certainly would provide you with a State-by-State breakdown.

Senator **Bingaman**. I would appreciate that.

### SPRUCE BUDWORM RESEARCH

Let me ask also about this budworm research program. I gather that you state in your prepared statement that one of the highlights of your research effort is the completion of the accelerated research phase of the joint United States-Canada spruce budworm program. At the same time, I see that you are cutting back on your research budget by 15 percent, and State and the private forestry program is being cut by 50 percent.

In northern New Mexico we had a problem with budworms this last year, and I'm just wondering what the kinds of reductions you are proposing in your own budget here would do to the ability of the Forest Service to help States deal with this problem. I specifically want to know if you would be able to provide the kind of help that we were in need of in New Mexico last year?

Mr. **Peterson**. I think there are two pieces to that, one is the research part. We have some reasonably good answers now on spruce budworm, although not good biological controls.

The second part of it is that there's a combination of Federal and State lands involved. Under this proposal we would fund any suppression activity on Federal lands, but would not share any suppression cost on private lands.

Senator **Bingaman**. And that's a change?

Mr. **Peterson**. That's a change, yes.

Senator **Bingaman**. I gather in the past you have been able to help with private land problems in this regard.

Mr. **Peterson**. Yes; we used to share about 50 percent of the cost on private land. We changed a few years ago to where it was a sliding scale. If it were industrial land, we shared less than if it was small nonindustrial private land, and another figure if it was State land. But it turned out to be about 40 percent. We generally shared about 40 percent of the total cost on private land.

This proposal, as indicated also in last year's President's budget, was that we would expect State and private people to pick up the cost on private land.

Senator **Bingaman**. That's all I had, Mr. Chairman. Thank you very much.

The **Chairman**. Thank you.

Senator Wallop.

Senator **Wallop**. Thank you, Mr. Chairman.

### DUAL-HATTING FS/BLM PERSONNEL

Following on a little bit of one of Senator Bingaman's questions, I wondered if you would provide for the Committee on, let's say, a monthly basis with aggregate figures—not individual figures but aggregate figures—of those people double-hatted to give us an ability to track how much is going on administratively?

Mr. **Peterson**. We can do that, but we had not even assumed that we would track that in our office. That would be done at the local level. See, it might only last for a couple of weeks. It might only be 1 week.

Senator **Wallop**. Well——

Mr. **Peterson**. Maybe we can give you—let me suggest this.

Senator WALLOP. Our problem is this, that we might have 4,000 or 5,000 one-way double-hattings that were not considered as being of significance, only to find out that the 1 week stretched into 1 month, stretched into 6 months, stretched into a year and then into a permanent policy.

Mr. PETERSON. What if we give you periodically a general description of what's happening and approximate numbers? Would that do you?

The CHAIRMAN. If the Senator would yield, do I understand your response, that the double-hatting you expect to have within the next 6 months would only be temporary assignments?

Mr. PETERSON. That would last until the legislation passed.

The CHAIRMAN. But that's different than saying it would be 2 weeks, because I almost guarantee you that you won't get legislation in 2 weeks.

Mr. PETERSON. What it might be, though, we might double-hat somebody for a specific job. It might only last 2 or 3 weeks.

The CHAIRMAN. I understand that. I think what we're looking for is how much of a permanent kind of a shift of responsibility in administration that you're looking for. I wouldn't want to see, as Senator Wallop has indicated, that we do it in the guise of, or behind the shield of, temporary assignments where actually you're going to say to a ranger in the district, "OK, you take over the management of that BLM area" or, to a BLM personnel, "OK, you take over the supervision of that forest area."

Mr. PETERSON. What if we gave you any double-hatting that we did of line officers like district rangers or forest supervisors or any significant numbers?

Senator WALLOP. There's a problem here. We don't want to indulge ourselves in an increase in bureaucracy, but, on the other hand, we don't want to find out that a whole lot has taken place, you know, that has another implication.

What we're seeking, I guess, is some tracking ability of how much is being done administratively to implement what ultimately is going to have to be done legislatively.

Mr. PETERSON. Let me suggest we do two things. There will be very little double-hatting done between now and June—maybe a half dozen, or two, or three dozen people.

Senator WALLOP. You know, I mean I guess—and I would ask Senator Bingaman and Senator McClure to be in on this conversation—if somebody from the BLM who was a landscape architect or archeologist comes in and takes a look at one site, I don't think that's what we're talking about.

What we're talking about is a relatively permanent change in job description.

Mr. PETERSON. If we provided figures on any area managers of BLM, Forest Service district rangers, forest supervisors, or any type of double-hatting, that is managerial, would that be sufficient?

The CHAIRMAN. It wouldn't, from my standpoint. I appreciate the Senator bringing this up. What I think we see as a practical matter is that you have got multidisciplinary land management teams in both the Forest Service and the BLM.

Mr. PETERSON. Yes.

The CHAIRMAN. And in some areas it would make sense to send a fisheries biologist over to consult with the other agency. In some areas it would make sense to have the archeologist doing the surveys on both pieces of land. Those would both be intermittent duties, but they would be permanent assignment changes, a change in the management philosophy that says share personnel in this area.

What we're getting at is how do we measure how much permanent intermingling of forces or double-hatting there might be, so that we can track what's going on, not because we're opposed, necessarily, but because we would like to know what's happening.

Senator WALLOP. Let me suggest to you that I'm not looking at this with an idea or a perspective of total skepticism. I think it is neat that we have capabilities that can be shared within agencies for specific things. It seems idiotic to have full-time employees that work part-time, whether for your agency or for the BLM.

But there is another sort of temp to this equation which is a fear that is legitimate because of the lack of specificity that there has been on the part of either agency as to what can and cannot be done administratively and to implement a situation that the Congress must react to; we're trying to get out of the position of being blackmailed into a decision, to use a probably stronger than necessary word.

But there are certain things that take place that leave you very little choice.

The CHAIRMAN. If the Senator will yield, I think there's another flip side to that, too, and that is that if we have the means by which we can track what's actually happening out in the field, the Congress is not likely to impose any bar to it. But if we don't have any way to track, then Congress is much more likely to say, "Hey, wait a minute, don't do a thing until we can see what it is you want to do."

Mr. PETERSON. Well, I think we're all seeking the same thing. I was just trying to prevent delivering you, once a month, 500 pages that said we've got a detail working 2 days with an interdisciplinary team. We do that now and certainly don't track that in this office.

I'm just trying to avoid giving you a bunch of paper that's meaningless to you. Let us give some thought and we'll make a proposal to you on how we might do this.

Senator BINGAMAN. Mr. Chairman, let me just insert, if I could, what's concerning me is that those things that you are doing administratively which you expect to revoke if Congress does not go along with your proposed interchange, those are the things that I—I mean, I am not concerned if you can find a more efficient way to administer things and work with another agency. I think that's great.

But if there are things that you're doing which you're going to have to undo if we don't go along with it, then I think I need to know about that somewhat, just to see the extent to which we are scrambling an egg that someone's going to have to unscramble if in fact Congress doesn't go along with this.

Senator WALLOP. I think we can probably work that out at a staff level that is satisfactory to all of us. But I think it's clear, at least from my perspective, that what I don't want to do is inundate ourselves with a blizzard of paper and you with the obligation of providing it. But there are some things that make sense in all this that I think are short of that.

Mr. **Peterson**. We'll work with your staff on the proposal, but we have no objection to providing you the information you think you need. It's just a matter of not producing a blizzard of paperwork. That's all I was concerned with.

### COLLECTING USER FEES

Senator **Wallop**. Mr. MacCleery, with regards to the question of user fees, I have been an advocate of having some means of collecting user fees that are reasonable and attributable to the public investment that is involved, whether it's a recreation area, boat ramp or what have you.

But the administration loses credibility on that issue when it makes proposals, as it has, with the Wallop-Breaux additions to the Dingell-Johnson fund, which is as direct a user fee—and was praised as such by the administration—as has been devised around here in a long time. And that was taxes paid by users of fishing and boating equipment to take care of fish habitat and boating access in the Nation's waters.

And so now all of a sudden these people who agreed to be taxed, you know, to support this are finding that the administration comes along and says well, that's too bad, what you agreed to. We have other plans for that money. Now if these things in your proposal are directly related to the ability of the Forest Service to provide first-class opportunities then well and good, but if they are simply going into a general fund and we find that at the end of it there has been a decline or diminishment of the quality of those services and all we've gotten is some revenues from other places, we've not done anything about budget deficits either.

We've just kind of walked away from our responsibility on the altar of today's convenience.

Mr. **MacCleery**. We do have a number of funds that we do operate, the KV fund, for example, on reforestation and improvement on timber sale areas. We collect receipts that are involved with brush disposal from purchasers and——

Senator **Wallop**. Those are commercial activities.

Mr. **MacCleery**. Up till now we have not been constrained from expending those receipts or those moneys on purposes for which they were collected. We certainly are acting in good faith that the money that would be collected from users would be plowed back into the resource.

Senator **Wallop**. But they're not. If you were, I wouldn't express concern. But the budget contains proposed appropriations language which would repeal provisions of Public Law 96-514, which provides that revenues collected from Federal agency recreation fee collections be paid into the Land and Water Conservation Fund.

Now it's in your budget. By taking that away, it would just go into general revenues of the U.S. Government. Now if you want to take it out of the Land and Water Conservation Fund and put it into some directly applicable recreation thing, fine. But you're not doing what you're saying. And the same thing took place in Wallop-Breaux and it is causing us concern as to what the purpose of user fees is.

Mr. **PETERSON**. I am aware of the concern involving legislation last year. Let me try to clear this up. The money would now go into the Land and Water Conservation Fund and be available on the Federal side only for land acquisition.

Senator **WALLOP**. I have no problem with that.

Mr. **PETERSON**. We would propose legislation to allow the fees to be returned to the agency involved, with the funds to be used to improve the recreation facilities.

Senator **WALLOP**. If that is what is proposed, that's fine. But that's not what the language in the appropriation submission suggests.

Mr. **PETERSON**. We haven't sent up the other half of it yet.

Senator **WALLOP**. Well, it's the other half that's concerning me, and I appreciate that. As long as I find the other half, I'll be all right.

Mr. **PETERSON**. We'll give you the other half soon, we hope.

### NET RECEIPTS PROPOSAL

Senator **WALLOP**. Now, the other thing is that we are informed that even to reach the level of $32 million as the total amount available to the States under your shared cost plan, that receipts would have to total $365 million in fiscal year 1986, compared to $238.8 million in fiscal year 1985, when we distributed $100-some million.

That's an incredible piece of bookkeeping—that we have to get $120 million more to receive $32 million as opposed to last year $238 million. That's a hell of a lot of costs you are attributing to something.

Mr. **PETERSON**. I'm not sure what numbers you are using there.

Senator **WALLOP**. Yours.

Mr. **PETERSON**. Well, I have seen several numbers, but let me point out that the proposal as we now understand it would be to take total receipts, to deduct certain costs—and we're still working on what costs would be involved—and end up then with a net amount a portion of which, would be shared with the States. The actual receipts for fiscal year 1984 were over $1 billion, and for 1985 are expected to be about $1.5 billion.

Senator **WALLOP**. Your assumption of $32 million or $31.9 million is based on a total distribution figure of $364.9 million, assuming no change in the current formula. My question is this: Last year you distributed $238 million. The next year you propose to distribute $32 million, or $206 million less, and in order to get to that figure, you have to sell $120 million more, which is a chunk of accountability that I think the States would rightly find objectionable.

Mr. **PETERSON**. Well, we would certainly expect to receive $120 million more in revenue.

The **CHAIRMAN**. But your estimates don't show that. Your estimates on your timber programs show a much lower figure than your estimates as to how you arrive at how much the States will share.

Mr. **Peterson**. I see what you're talking about now. The 1985 receipts that are upcoming right now have a one-time payment of about $190 million in connection with the timber buyout. That makes the 1985 receipts an unusual amount of receipts compared to 1986. So if you look at those gross numbers, that's the kind of numbers you get.

The **Chairman**. But your estimate of how much would be distributed to the States is based upon the higher figure, not your expected receipt figure.

Mr. **Peterson**. It's based on 1985, not 1986 receipts. We're always a year behind, so we're looking at the 1985 receipts versus 1984 receipts.

The **Chairman**. If you have the same amount of costs to allocate over the same amount of receipts, the States would get zeroed out. You are not talking about a reduction; you're talking about an elimination.

Mr. **Peterson**. Let me try to go back. You see, you're always a year behind. So what you have to look at is the 1984 actual versus 1985 estimated. The 1984 actual was about $1 billion, as I indicated; 1985 is expected to be about $1.5 billion. And it's the $1.5 billion that would be included in the calculations for the 1986 distribution.

So, there is that substantial increase between 1984 and 1985. I can see the confusion. We're 1 year behind, so you're not comparing 1985 and 1986 receipts.

Senator **Wallop**. It's not the 1 year behind that's troubling me so much as the $206 million behind.

Mr. **Peterson**. OK. I was trying to straighten out the mathematics we were worrying about. It is a reduction of that amount; that's correct.

The **Chairman**. Would the Senator yield just one step further?

Senator **Wallop**. Yes.

The **Chairman**. If that's correct, though, and the receipts drop in 1986, and the costs don't drop in 1986, you have shown us why the receipts are higher in 1985 than they will be in 1986, but you haven't told us why the costs will be lower in 1986 than they were in 1985. If you take the same costs and allocate to reduced receipts, then there is nothing left to share. We're right back where we were before Congress amended the statute.

Mr. **Peterson**. That would certainly be a problem 1 year from now if that happened, yes.

The **Chairman**. That's exactly what I'm trying to say.

Senator **Wallop**. It causes a certain amount of heartburn that can't be spelled R-o-l-a-i-d-s. [Laughter.]

Mr. **Peterson**. I agree.

### ADMISSION FEES ON NATIONAL FOREST

Senator **Wallop**. Is there a contemplation of proposing admission fees to the national forests?

Mr. **MacCleery**. We have a team looking at various options, and that is one of the options. One of the options would be to go to, for example, admission fees for statutorily designated areas like recreation areas and wild and scenic rivers and these kinds of things which have been set forth with one of the primary purposes being the recreational uses of those lands.

Our recreation program, I think the total costs are in the neighborhood of $150 million a year. We generate now about $30 million in receipts. And the recreational use of the national forest is over 200 million recreation visitor-days per year. We need to capture a considerably larger percentage of the costs of carrying out the recreation program than we do now.

Senator WALLOP. Well, I can appreciate that, but one of the things that worries me is you get into a situation that is the worst of all possible worlds, and that is the establishment of an aggravation that does nothing for the problem of collecting increased fees. In other words, it'll cost you more to collect it and enforce it than it will generate in revenues.

Then you have something which is just the worst that it can be.

Mr. MACCLEERY. We are concerned about that as well. And our proposal will be one which will take into account the costs of administration. We wouldn't consider anything that doesn't generate a considerable amount of net returns for the trouble we're going to go through.

Senator WALLOP. I can appreciate what you're saying, but it wouldn't be unique in the annals of bureaucracy to consider something that results in that.

Mr. PETERSON. Let me add to that, if I might. We have been working now for about 3 years with several national groups that also have local chapters—National Wildlife Federation, the Wildlife Management Institute, the National Recreation Coalition, and others—to address the very question of how we could provide for some increase fees for recreation, and wildlife, and fish users of the national forest in a way that would not have a big hassle factor.

Senator WALLOP. I think that's important.

Mr. PETERSON. And what we have come up with in concept now is a series of principles. One principle is that the funds would be available to the agency to do work of the nature which is essential to get the support of those groups.

The second is that we have some type of a short-term permit or use, maybe up to 5 or 6 days, that might be rather modest both for an individual and a family and would not apply to anybody say 16 or under. It might be in the range of $2 to $5 for this 6-day use. And then there might be on an annual basis, both a family and individual fee.

Again, the administration of the proposal would be primarily as the State fish and game agencies have done for years, and that is just primarily the honor system with some checking. We're not talking about gates or those types of things.

The biggest problem that we're trying to resolve now before we come here with a specific proposal is administration.

We definitely are not going to propose something that has high administrative costs or that causes erection of a lot of gates around national forests.

### GRAZING FEES

Senator **Wallop**. I have two quick questions, and then I have some that I will submit.

In the submission you have made the assumption of nearly 100 percent increase in grazing fees on the National Forest System lands to $13.2 million in 1986. The question is does that increase reflect the position of the Forest Service on the alternatives which will be contained in the grazing fee report?

Mr. **MacCleery**. No, it doesn't. We hope to make the grazing fee report available in the next couple of weeks for public comment. There will be several alternatives. Going to fair market value would be one. There will be a number of other alternatives. There will be no preferred alternative and we'll make that report available to the Congress and to the public for their comment.

Senator **Wallop**. What reflection does it represent, the 100-percent increase?

Mr. **MacCleery**. It represents moving in the direction of increasing fees to cover costs and moving in the direction of fair market value. But you're asking what the positions that we will present in the grazing fee study. We will put forth the alternatives without a preferred alternative indicated and listen to what people have to say.

Senator **Wallop**. I think our problem is that there is $13 million in revenues that somehow or another we are going to have to find a way to pick up from someplace else if the grazing fee should not double. It's an easy way of laying the blame on us for the decline in services in other areas. But it's a pretty wild assumption that you're going to double them, especially given the situation of livestock markets and American agriculture as it stands today.

We're just going to have to find $13 million or be labeled budget busters.

Mr. **Peterson**. The proposal is really only a $5.3 million change; $7.8 million is based upon 1985 appropriations. The 1985 year of $13.1 million or $13.2 million is the estimated for 1986, so it is a $5.3 million change.

Senator **Wallop**. That's right. I've got it.

Well, what happens now should the grazing fee formula that was established in the Public Range Lands Improvement Act expire at the end of 1985 and Congress fails to enact or to resolve the grazing fee issue by that time? How will the Forest Service establish the fee in 1986 and what is it likely to be?

Mr. **MacCleery**. Well, it's premature. We would hope the Congress would act.

Senator **Wallop**. Your answer may prompt us to act.

Mr. **MacCleery**. Well, we haven't come to a decision on that because we have not had to face that. You know, we have not even made a recommendation and we won't make a recommendation until we get the comments on the study. The hopefully we can work with you to develop a legislative response which will not force us to act in the absence of legislation.

Senator **Wallop**. Nothing like those deadlines to force either side to act.

Mr. PETERSON. I believe that the formula only goes through 1985. So we will be without that formula and without that formula I suspect we will go back to the 52 independent agencies approach, which says it moves to fair market value. I'm not sure.

Senator WALLOP. Whatever that is. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Would it be fair to say that the grazing fee figure was supplied to you by OMB to be submitted in your budget?

Mr. MACCLEERY. That would be a fair statement.

The CHAIRMAN. Thank you.

Senator Evans.

Senator EVANS. Thank you, Mr. Chairman.

### COLLECTING ADMISSION FEES

Just to briefly follow up and perhaps a comment more than a question on the recreation user fees, I sat and listened to the colloquy back and forth, and I suggest you take a long look at that concept before it's sent up to us.

I know from my own experience over many, many years in the Northwest that when you're talking about forest areas or national recreation areas in our part of the country you're talking about half a million to 1 million acres with a vast multitude of entrances and exits, of roads and trails, and lakes and back-country opportunities for hiking with hundreds of thousands of people each year using those areas.

I cannot conceive how under any circumstances you're going to get a reasonable way to assess a fee for that use. And I don't think the corollary with fishing and hunting licenses is quite apt. Fishing particularly, and especially salmon fishing, is quite easy to check. People all tend to come back to the same place they left from. One person can check a whole lot of people and there is significant checking and significant costs that go along with that.

Do you anticipate that anyone yet has suggested an appropriate way that doesn't carry with it a lot of harrassment to hit those particular kinds of situations? I can understand the problem or the potential in developed or even semideveloped camping areas or campgrounds, but the rest of it, it seems to me, is beyond our capacity.

Mr. PETERSON. Well, to say that we have taken a long look at it would be true, because we've been struggling with this question for about 20 years.

Senator EVANS. I have run up against it several times before.

Mr. PETERSON. And you are correct that some areas would be a bigger problem than others. And I mentioned that to a large degree on many national forests, you would simply be primarily dealing with the honor system. Now when we had the Golden Eagle passport, which was an annual permit, a lot people purchased those, some who never went to the forest.

Senator EVANS. But, as I remember, the receipts from the Golden Eagle Passport were very substantially less than the early estimates of receipts, isn't that true?

Mr. PETERSON. Yes, and I think the reason for that is at that time we had a Golden Eagle Passport, there were a lot of other fees depending on the situation. And so one of the things we're trying to do with this proposal is not to get a lot of other fees.

If we've got a user permit for a national forest, that would generally let the person do whatever they wanted to do in the national forest, maybe with the exception of camping in a highly-developed camp ground. We would not have a bunch of other fees, and I think, that was one of the problems with the Golden Eagle.

Senator EVANS. I suggest there might be a better name than a passport, which connotes entering into a foreign land.

Mr. PETERSON. We're not going to use that.

Senator EVANS. I think that would probably be a wise idea.

### EFFECT OF NET RECEIPTS PROPOSAL ON COUNTIES

Let me turn to the sharing of receipts with States. Have you examined that net receipts program with any detail to determine what effect that would have on the various counties when you get down to that level within the States? I know that in our own State, it would be a loss, but a sustainable loss in some counties where there is a moderate amount of timber harvest.

In other counties, that particular receipt is a very high share of the total receipts that come to the county and would absolutely and without question devastate the ability of that county to even operate. Have you done any kind of examination of those consequences?

Mr. MACCLEERY. We looked at last year in relationship to our tax equivalency proposal. We have not yet looked in depth on a sample basis with respect to this proposal. That is something we will need to do in order to assess what it would do to situations like you speak of.

Senator EVANS. I would suggest that would be an important element if there's any hope to attain any such program, to really look at some of those. We have an admittedly small county in terms of population in our State, but Skamania County is about 75- to 80-percent forest and the remaining land base that's taxable is pretty small. And in fact what is in the national forest is probably under the department of natural resources and is State land.

So their loss of receipts—and I don't know what percentage it is but I would be willing to bet it's a sufficient percentage that would cause them to be unable to operate even the most basic county functions.

Mr. MACCLEERY. We would certainly have to take a look at that.

### TIMBER SALES

Senator EVANS. Let me turn to the more fundamental. I understand that your basic judgment on timber sales derives from your expectation of housing starts and the economy that flows from those housing starts. As I remember, in the budget request for 1985, you estimated 1.9 million housing starts and are now estimating that in fact it will be closer to 1.7 million. Both Wharton and DRI are suggesting something in that same range.

What's been the—have you, as a result of that downturn in housing starts from your original projections—do you have a revenue shortfall that comes from that changed estimate?

Mr. PETERSON. We think the revenue estimate for 1985 is reasonably close. The big items we don't know is, as you remember, the timber buyout legislation. That act provided that people pay some money upfront but also allows them to defer the payment under certain circumstances and pay interest on it.

We simply don't know what that number might be, so we could be as much as $100 million off in our projections.

Senator EVANS. Are your estimates based on most people delaying as long as the law allows them to or that they would pay upfront?

Mr. PETERSON. No. It's a mix. We are assuming that larger companies and so on would pay; some of the smaller companies would defer.

Mr. MACCLEERY. The law indicates that the Federal Government should do that only as a last resort for those who cannot obtain, cannot finance the buyout charges. How many will pass the test is uncertain at this point.

Senator EVANS. I would suggest that probably a good share of them will pass any poverty test you apply to them, and I would guess that the receipts, that more are going to be delayed than any of us thought at the beginning.

### ROAD CONSTRUCTION

Are road construction needs overestimated as a result of your expectation of housing starts and timber sales at the beginning of the year compared with what's actually happened?

Mr. PETERSON. No. We have shown, as you probably noted, in the budget a decrease in appropriated road construction from $230 million to $190 million. There is also a reduction in purchaser credit.

Now we have had a situation the last 2 or 3 years where we did estimate more purchaser credit then turned out to be needed because the companies did not build as many roads as we expected and housing starts did not pick up. We did, in 1985, overestimate purchaser credit.

What we don't know, in 1986, is whether roads are already built under the timber sale contracts that may be turned back. So our estimate for the amount of purchaser credit in 1986 is admittedly a soft estimate until we get these turnbacks.

It's our best judgment of where it might be.

Senator EVANS. I know in the 1985 appropriation, at least in the note we received from the committee, it shows a credit for the use of timber purchaser credits, $226 million, derived by transfer from unused funds from timber purchaser road credits previously appropriated prior to 1982.

What's the trend of this total amount of unused funds from timber purchaser road credits? It is trending downward, upward? Do we have a backlog that's gone? Or kind of where are we?

Mr. PETERSON. The adjustment that was made in 1985 brought us up to date. It could be that depending on which roads are turned back, we could miss our 1985 estimate by $50 to $70 million. We may have $50 to $70 million more than we need, depending on what happens on turnbacks.

Senator EVANS. But at this point, after that adjustment are there unused road credits that go back from earlier years?

Mr. PETERSON. No, no.

Senator EVANS. That's all caught up?

Mr. PETERSON. It would only be unused credits from fiscal year 1985, which we think could be $50 to $70 million. That could evaporate very fast if the market picks up and purchasers turn back sales for roads already built, and need to build additional roads.

With 10 billion feet that they can select, in sales that they want to turn back, it's impossible to guess what that's going to be.

Senator EVANS. I understand that.

### WOOD USE

In looking ahead for 1986, your budget request shows housing starts at 1.9 million, 1987 at 2 million, and then 1.9 million in the outyears beyond that. That is quite substantially higher than the estimates being made by other national organizations. DRI, Wharton, all show a significantly lower number of housing starts, both in the fiscal year 1986, or in the calendar year 1986, and in the outyears beyond that.

How do you come to that difference?

Mr. PETERSON. Well, Wharton has been predicting a depression right around the corner for several years now.

Senator EVANS. Yes, but it looks like their estimate of 1985 is a lot closer than the budget request you submitted in the beginning of 1985.

Mr. PETERSON. It is now, but not at the time we submitted it. At the time we submitted that they were down around 1.3 or 4 as their estimate. All I can tell you is that the Wharton projection, Wharton's for 1985 initially was 1.4 against our 1.9. It came out to 1.7, so historically we were closer than Wharton.

Senator EVANS. How about DRI?

Mr. PETERSON. DRI went through a period that they were optimistic and a period they were pessimistic. I don't have it here, but DRI is higher than Wharton now.

Senator EVANS. Not much.

Mr. PETERSON. Not much. All I can tell you is that if you assume that the economy is going to stay strong through 1986 and 1987, now Wharton's projection does come back up in 1988, so they show a dip in 1986 and 1987. The sales that we would be concerned with in 1986 would be for meeting that housing market in 1988 and 1989, where Wharton is back up, back up at 1.9 in 1988.

Senator EVANS. I have a concern that goes beyond any of those estimators, whether Wharton, DRI or even OMB. And that is the question as to whether housing starts per se are a very accurate measure of what's happening, especially if we are trending housing starts based on past experience, past numbers of housing starts, and especially the lumber production and consumption that's associated with those housing starts.

I have asked the question quite specifically of a number of major timber operators in our own part of the country, and essentially along this line. Is a house today the same as a house 10 years ago, 15 years ago, or 20 years ago in terms of average size? The answer invariably is no. Is the amount of lumber per house today as opposed to 10, 15, or 20 years ago the same? And the answer invariably is no.

The then-following question is: What unit of lumber per housing start would there be today as opposed to 10, 15 or 20 years ago? The answer varies, depending on their experience. But, they say at least 10 and perhaps up to 30 percent reduction in the amount of wood used per housing start.

Have you examined at all this kind of reduction, and is it reflected at all in the figures for timber?

Mr. PETERSON. We have examined those numbers in some considerable detail. In the 1960's and 1970's, people were predicting that housing was going to smaller in size; in fact, it got larger during that period.

There seems to be a recent trend now for the first time in a long time, for the size of housing to be reduced somewhat and for somewhat more multifamily housing. This would in fact reduce wood use. But that's a very recent development. If you go back 10 years the reverse is true.

Senator EVANS. You don't have to go back much less than 10 years. You know, the shrinkage started essentially with the sharp increase in energy prices and the catching up with the smaller family sizes, all of which happened in the mid-1970's.

Mr. PETERSON. And in fact it didn't happen. Everybody thought it would happen, and it didn't happen. If you look at the size of houses that were built up until about 2 years ago, the size of house still continued to increase slightly, in spite of the fact that families were smaller.

Senator EVANS. That's interesting. That's not been the experience in the work that we did in developing the Pacific Northwest Regional Power Council activities. Maybe they're building whopping big houses in Texas or someplace, but that's not been the trend in the Northwest.

Mr. PETERSON. There are several things that are happening in the Northwest. As you point out, energy costs were very, very low in the Pacific Northwest for a long period of time and they did increase. What seems to be happening in the Pacific Northwest is that because of a significant increase in transportation costs coming east, the recovery of the Eastern forests of the United States, and because of the relative closeness of the Canadian markets, there has been a great difficulty of the Pacific Northwest markets penetrating Eastern markets.

Senator EVANS. I understand that. I'm not talking about the market for timber; I'm trying to get at the more fundamental and national question.

Well, regardless of when it turned down, you apparently see a decline now in the cubage of wood used for housing starts. The substitution, whether the houses are as large as they were or not, there is no question that we are substituting other materials for wood in an increasing share of houses.

We are finding we are using, even where we use wood, the lightweight and premanufactured trusses and other elements, construction elements, which cause the use of less wood to get the same space and the same kind of activity.

Have you at this point reflected any of that in your estimates of harvest, or are you still working just on the basis of housing starts?

Mr. PETERSON. No, we're not just working on housing starts. We have a unit in our research part of the Forest Service that does in fact track the amount of wood on a sample basis being used in different kind of houses, also the size of houses. That's very sophisticated work that's being done there, and it does show some changes both ways.

Back in the late 1960's, for example, you saw aluminum studs showing up. You don't see that any more because of energy costs. So there's been substitutions both ways, and it's not a static thing. A change in different parts of the country reflecting the energy crisis, caused many people to go toward wood because of its better energy efficiency.

So there has been some movement both ways.

Senator EVANS. Would you provide us with some of that recent research, please?

Mr. PETERSON. Yes.

Mr. MACCLEERY. We see some trends of wood moving into markets that were other materials. In the south, wood use is moving into areas that were masonary. There is more use of wood in the foundations. The wood permanent foundation, made entirely of wood, is expanding.

### TREND OF WOOD USE

The trend has been, since World War II, of fairly continuing increases in the size of the house. Houses were quite small after World War II. In the building boom that followed, and since then, housing size has slowly, in some cases rapidly, increased. The average size tends to drop during a recession. But afterward they seem to pick back up again.

Senator EVANS. You are expecting that that same thing is happening now?

Mr. MACCLEERY. I think we may be in a different situation now than we have historically. But, in coming up with the RPA assessment of potential demands for wood in the next two or three decades, Forest Service personnel took a very close look at trends in housing size and the unit of wood usage in the homes, and made some alternative projections of what the use would be and what that would mean.

Even if you make some assumptions that there is going to be some downsizing and that use of wood may be less, it still indicates that there will be a substantial increase in the usage of wood over the next two decades, over what we're using today, just to meet the needs of society for housing.

### TIMBER HARVEST

Senator EVANS. Why do you judge that although the harvest was up prices presumably, or you state in response to the general rebound of housing along with other segments of the economy, that price didn't go up along with that?

Now that is an aberration from all past trends, when you have had housing starts go up, and I know that in your statement you had several elements that you thought caused that. Could it be that part of that cause is that we've got too much timber for the number of housing starts or the other uses, that housing starts have rebounded but the amount of timber required for those housing starts isn't as much as we thought it would be?

Mr. MacCleery. Well, the total volume of wood is also at very high levels, or almost record levels. The housing starts are up, but the wood that's going into those houses is also up. The harvest is up on the west coast. The prices just have not responded. And I think the main reason there is the impact of the Canadian supply coming in.

We are using the wood. We are harvesting the wood. But the prices that are being paid in the market, is not what it would historically be. If we were generating the same amount or if prices were based on the economy consuming the same amount of wood as we did last year, the prices would be expected to be much higher than they actually were.

And one reason is that quite a bit of the supply is coming from Canada.

Mr. Peterson. Housing starts are down in Canada. They are down in Japan and some other places. That has put pressure on the supply. There's been a good supply then left in the United States, so you've got the relationship of supply and demand, which is still on the side of supply in the United States. This situation has caused housing lumber prices not to go up, even though there is volume.

Senator Evans. Were your housing starts estimated for 1986 and 1987 and beyond based on the general economic assumptions that the administration or OMB has chosen for the gross national product growth and others?

Mr. Peterson. Yes, they are.

Senator Evans. Does it also depend on the kind of lowering of interest rates that they are expecting during the next several years?

Mr. Peterson. Yes.

Senator Evans. The most significant difference in projection of future trends is in that one element, and it seems to me that the administration is out of bed with almost everybody else. I hope that they're right. It would be marvelous if they were. But it seems to me that if that's the one where we're way out and that's the one that perhaps has more to do with housing starts and, as a result, timber sales than any other single factor, are we playing a little Russian roulette, depending upon that kind of, you know, very, very strong reduction in interest rates during the next several years?

Mr. MacCleery. Well, it's hard. You make your assumptions and then you see what the implications would be. If interest rates do trend upward sharply from what they are now, then it would have a very significant effect on housing demand and on the economy as a whole.

Senator Evans. But your expectations in housing starts are based on interest rates trending sharply downward from where they are today.

Mr. MacCleery. They are based on the OMB's projections of economic activity in the economy and all the other assumptions, including interests rates, that are the foundation for those projections of economic activity. They're not directly related to interest rates but to the economic activity.

Senator Evans. No, I understand all of that. You can track all of the others, but then when you track all of those and look at interest rates, just somehow it doesn't track with anybody else, even when you get quite good similarity with the other measurements of economic activity.

Mr. Peterson. Well, that very fact, though, has compounded some of the estimates a couple of years ago, because nobody would have predicted 1.7 million housing starts with the interest rates that we have today. That would have been more appropriate at about 8-percent interest rates.

So a couple of things have happened. You've got more two people in a family working, so you have got two wage earners, so you've got some other things that appear to be pushing housing starts higher than traditional forecasting would have had a few years ago.

But the question of how much—you are quite right to point out that relationship between interest rates and housing starts is there. We don't know exactly how it will move.

Senator Evans. Thank you.

[Subsequent to the hearing the Forest Service submitted the following information:]

United States
Department of
Agriculture

Forest
Service

Washington
Office

12th & Independence SW
P O Box 2417
Washington, DC 20013

Reply to 1930

Date MAR 22 1985

Mr. Joe Mentor
Legislative Assistant to
  Senator Daniel J. Evans
United States Senate
Washington, D.C. 20510

Dear Mr. Mentor:

Enclosed is the information on housing starts and wood use requested by Senator Evans at the Energy and Natural Resources Hearing on March 1.

Sincerely,

J. LAMAR BEASLEY

J. LAMAR BEASLEY
Deputy Chief

Enclosure

cc:
Richard Grundy, Energy and
  Natural Resources Committee

## Impacts of Alternative Views of the Future on Timber Demands, Supplies, and Prices

Forest Service projections of timber demands, supplies, and prices are based on assumptions and projections of a large number of determinants such as economic activity, personal income, housing construction, processing efficiency, tariffs, area of commercial timberland, and timber management practices. These assumptions and projections are consistent with general societal goals of full employment, continued economic growth, rising incomes, recent trends, and current expectations about the future. Thus, they represent a general view of the most likely course of events at the time they were wade.

Of course, the future changes in these determinants may be greatly different from those assumed or projected. In recognitions of this uncertainty, the Forest Service, in recent years, has simulated the impacts of a range of alternative views about changes in the major determinants on timber demands, supplies, and prices.

Assumptions which lower demands, such as a low housing simulation, reduce the projected rates of price increases. On the other hand, those that increase demands or decrease supplies, such as higher timber product exports or increased losses of commercial timberland area raise the rates of increases.

As an illustration, the price impacts on softwood lumber of a low housing future--housing starts 25 percent below those used in 1983 Assessment Supplement, fewer single family units, smaller units, and lower wood use per unit--are shown in the enclosed figure. Even with these reductions there are still substantial price increases.

Although the rates of increases vary, all of the simulations that have been made indicate that the Nation is faced with the prospect of continued and substantial real increases in stumpage prices for most species and sizes of timber, and in the real prices of most timber products. The increases are largest for softwood sawtimber, high quality hardwood sawtimber of preferred species and the products, mainly lumber and plywood, made from that timber.

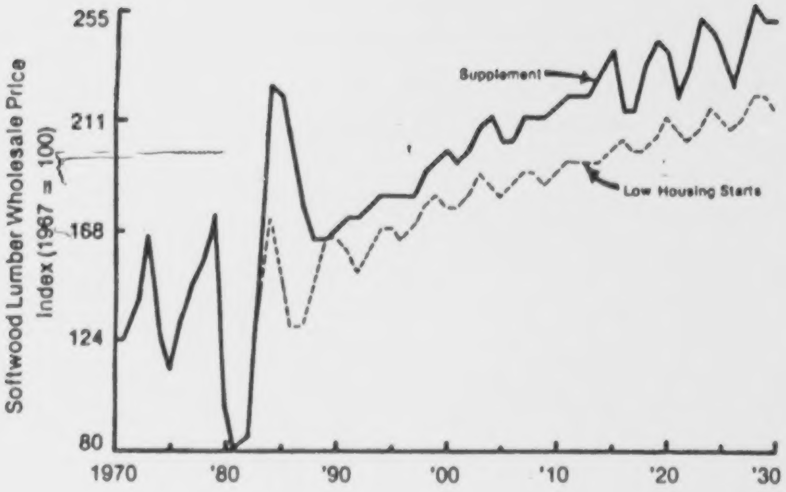

Figure .--Projections of the softwood wholesale lumber price index under alternative housing demand assumptions

Estimated softwood lumber and plywood use in single family housing, 1952-1984, with projections to 2030

| Year | Average floor area | Average lumber use | | Average plywood Use | |
|---|---|---|---|---|---|
| | | Per sq. ft. floor area | Per housing unit | Per sq. ft. floor area | Per housing unit |
| | Square feet | Board feet | Board feet | Square feet 3/8 in. basis | Square feet 3/8 in. basis |
| 1952 | 1,185 | 10.20 | 12,090 | 0.93 | 1,100 |
| 1962 | 1,422 | 8.38 | 11,920 | 2.25 | 3,200 |
| 1970 | 1,500 | 7.35 | 11,030 | 3.65 | 5,480 |
| 1976 | 1,700 | 6.76 | 11,490 | 3.42 | 5,810 |
| 1984 1/ | 1,780 | 6.62 | 11,780 | 3.28 | 5,840 |
| | | | Projections | | |
| 1990 | 1,850 | 6.34 | 11,730 | 2.98 | 5,510 |
| 2000 | 1,950 | 6.19 | 12,070 | 2.77 | 5,400 |
| 2010 | 1,975 | 6.09 | 12,030 | 2.67 | 5,270 |
| 2020 | 1,990 | 6.03 | 12,000 | 2.58 | 5,130 |
| 2030 | 2,000 | 6.00 | 12,000 | 2.53 | 5,060 |

1/ Preliminary.

Source: U.S. Department of Agriculture, Forest Service.

The attached chart shows the estimated average square feet of floor area for single-family houses started 1950-1984, and comparisons of projected floor area using past relationships with per capita income, log per capita income, fitted regression trend, and the estimates used in the Forest Service's 1984 Supplement to the 1979 Assessment of the Forest and Range Land Situation in the United States. The income and trend projection equations were derived by regression analysis and all three showed high correlation with average floor area. The smaller projected increase used in the Assessment Supplement implies that in the future, the relationship between income and average single family house size will be different than in the past and that a smaller part of a person's income will be used to buy larger sized units.

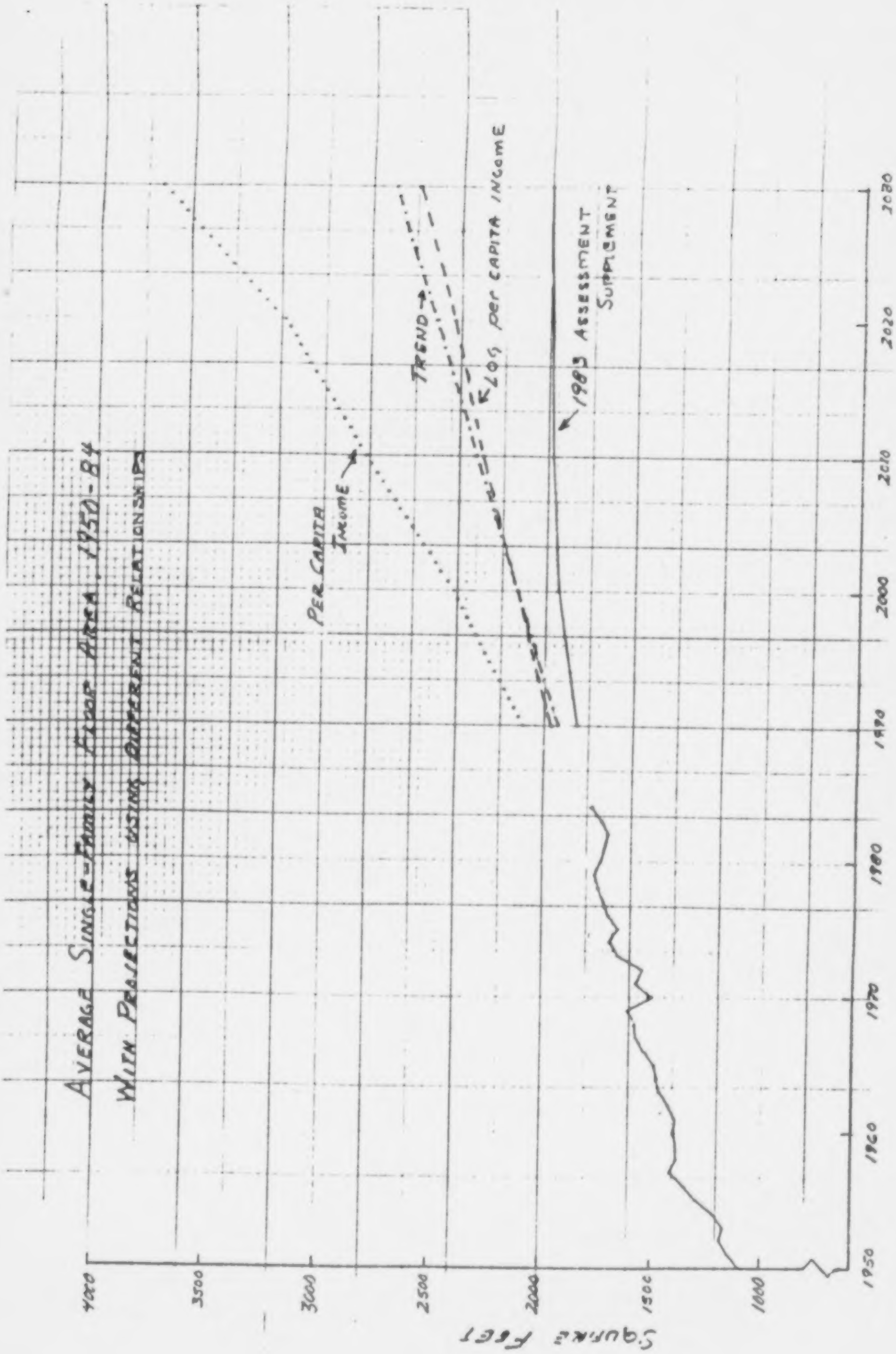
AVERAGE SINGLE-FAMILY FLOOR AREA, 1950-84
WITH PROJECTIONS USING DIFFERENT RELATIONSHIPS
PER CAPITA INCOME
TREND
LOG PER CAPITA INCOME
1983 ASSESSMENT SUPPLEMENT
SQUARE FEET
4000
3500
3000
2500
2000
1500
1000
1950
1960
1970
1980
1990
2000
2010
2020
2030

Table .--Average size of housing units by type of unit, 1950-84, with Forest Service Projections to 2030

(Square feet of floor area)

| Year | Single family | Multi-family | Mobile homes |
|---|---|---|---|
| 1950 | 1,094 | 782 | 480 |
| 1951 | 1,153 | 800 | 480 |
| 1952 | 1,185 | 798 | 480 |
| 1953 | 1,166 | 760 | 480 |
| 1954 | 1,212 | 765 | 490 |
| 1955 | 1,284 | 783 | 500 |
| 1956 | 1,350 | 795 | 500 |
| 1957 | 1,402 | 812 | 520 |
| 1958 | 1,387 | 819 | 540 |
| 1959 | 1,394 | 806 | 560 |
| 1960 | 1,397 | 856 | 580 |
| 1961 | 1,396 | 843 | 600 |
| 1962 | 1,422 | 859 | 610 |
| 1963 | 1,466 | 877 | 630 |
| 1964 | 1,476 | 881 | 640 |
| 1965 | 1,487 | 898 | 650 |
| 1966 | 1,535 | 936 | 660 |
| 1967 | 1,570 | 969 | 670 |
| 1968 | 1,580 | 986 | 670 |
| 1969 | 1,650 | 1,013 | 684 |
| 1970 | 1,500 | 956 | 732 |
| 1971 | 1,570 | 1,011 | 780 |
| 1972 | 1,555 | 1,035 | 780 |
| 1973 | 1,660 | 1,031 | 882 |
| 1974 | 1,695 | 1,021 | 910 |
| 1975 | 1,645 | 1,000 | 952 |
| 1976 | 1,700 | 940 | 966 |
| 1977 | 1,720 | 938 | 1,000 |
| 1978 | 1,755 | 902 | 1,010 |
| 1979 | 1,760 | 938 | 1,050 |
| 1980 | 1,740 | 979 | 1,060 |
| 1981 | 1,720 | 980 | 1,050 |
| 1982 | 1,710 | 990 | 1,040 |
| 1983 | 1,725 | 942 | 1/ |
| 1984 | 1,780 | 914 | 1/ |
| | Projections | | |
| 1990 | 1,850 | 1,065 | 1,220 |
| 2000 | 1,950 | 1,080 | 1,310 |
| 2010 | 1,975 | 1,090 | 1,370 |
| 2020 | 1,990 | 1,095 | 1,390 |
| 2030 | 2,000 | 1,100 | 1,400 |

1/ Not available.

Source: U.S. Department of Agriculture, Forest Service estimates based on data from the Manufactured Housing Institute; McGraw-Hill/F.W. Dodge; Mobile Home Manufacturers Association; U.S. Department of Commerce, Bureau of the Census, and Business and Defense Services Administration; U.S. Department of Housing and Urban Development, Federal Housing Administration; U.S. Department of Labor, Bureau of Labor Statistics; Standford Research Institute.

Projections: U.S. Department of Agriculture, Forest Service.

WOOD PRODUCTS DEMAND RELATED ECONOMIC STATISTICS -- HOUSING

| Year | Total population | Disposable personal income | Total households | New home mortgage interest rates 1/ | All new housing units: Total all units | New housing starts: Total starts | 1-family: Number starts | 1-family: Floor area | Multifamily: Number starts | Multifamily: Floor area | Mobile homes: Number ships | Mobile homes: Floor area | Residen upkeep & improve expends |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Million | Billion 1972 dollars | Million | Average percent | Thousand units | Thousand units | Thousand units | Average square feet | Thousand units | Average square feet | Thousand units | Average square feet | Million 1972 dollars |
| 1950 | 152.3 | 326.8 | 43.6 | 1.58 | 2,054 | 1,991 | 1,749 | 1,094 | 242 | 782 | 63 | 480 | ------ |
| 1951 | 154.9 | 372.6 | 44.7 | 1.98 | 1,588 | 1,521 | 1,330 | 1,153 | 191 | 800 | 67 | 480 | ------ |
| 1952 | 157.6 | 383.2 | 45.5 | 2.36 | 1,617 | 1,534 | 1,349 | 1,185 | 185 | 798 | 83 | 480 | ------ |
| 1953 | 160.2 | 399.1 | 46.4 | 2.64 | 1,544 | 1,467 | 1,301 | 1,186 | 166 | 760 | 77 | 480 | ------ |
| 1954 | 163.0 | 403.2 | 47.0 | 2.81 | 1,658 | 1,582 | 1,440 | 1,212 | 142 | 765 | 76 | 490 | ------ |
| 1955 | 165.9 | 426.8 | 47.9 | 3.06 | 1,791 | 1,679 | 1,545 | 1,284 | 135 | 783 | 112 | 500 | ------ |
| 1956 | 168.9 | 446.2 | 48.9 | 3.51 | 1,500 | 1,376 | 1,248 | 1,350 | 128 | 795 | 124 | 500 | ------ |
| 1957 | 172.0 | 455.5 | 49.7 | 3.89 | 1,367 | 1,248 | 1,079 | 1,402 | 169 | 812 | 119 | 520 | ------ |
| 1958 | 174.9 | 460.7 | 50.5 | 3.96 | 1,512 | 1,410 | 1,176 | 1,387 | 234 | 819 | 102 | 540 | ------ |
| 1959 | 177.8 | 479.7 | 51.4 | 4.42 | 1,674 | 1,554 | 1,251 | 1,394 | 303 | 806 | 120 | 560 | ------ |
| 1960 | 180.7 | 489.7 | 52.6 | 4.76 | 1,400 | 1,296 | 1,009 | 1,397 | 287 | 856 | 104 | 580 | ------ |
| 1961 | 183.7 | 503.8 | 53.6 | 4.85 | 1,455 | 1,365 | 989 | 1,396 | 376 | 843 | 90 | 600 | ------ |
| 1962 | 186.5 | 524.9 | 54.6 | 5.06 | 1,610 | 1,492 | 996 | 1,422 | 496 | 859 | 118 | 610 | 16,020 |
| 1963 | 189.2 | 542.1 | 55.3 | 5.89 | 1,786 | 1,635 | 1,013 | 1,466 | 622 | 877 | 151 | 630 | 16,250 |
| 1964 | 191.9 | 580.8 | 56.1 | 5.83 | 1,752 | 1,561 | 973 | 1,476 | 589 | 881 | 191 | 640 | ------ |
| 1965 | 194.3 | 616.3 | 57.4 | 5.81 | 1,726 | 1,510 | 965 | 1,487 | 545 | 898 | 216 | 650 | 16,230 |
| 1966 | 196.6 | 646.8 | 58.4 | 6.25 | 1,413 | 1,196 | 780 | 1,535 | 416 | 936 | 217 | 660 | 15,930 |
| 1967 | 198.7 | 673.5 | 59.2 | 6.46 | 1,562 | 1,322 | 845 | 1,570 | 477 | 969 | 240 | 670 | 15,440 |
| 1968 | 200.7 | 701.3 | 60.8 | 6.97 | 1,863 | 1,545 | 900 | 1,580 | 645 | 986 | 318 | 670 | 16,560 |
| 1969 | 202.7 | 722.5 | 62.2 | 7.81 | 1,913 | 1,500 | 811 | 1,605 | 689 | 1,013 | 413 | 694 | 15,670 |
| 1970 | 205.1 | 751.6 | 63.4 | 8.45 | 1,870 | 1,469 | 815 | 1,500 | 654 | 956 | 401 | 732 | 16,580 |
| 1971 | 207.7 | 779.2 | 64.8 | 7.74 | 2,581 | 2,084 | 1,153 | 1,570 | 931 | 1,011 | 497 | 780 | 17,340 |
| 1972 | 209.9 | 810.3 | 66.7 | 7.60 | 2,955 | 2,379 | 1,311 | 1,555 | 1,068 | 1,035 | 576 | 780 | 17,500 |
| 1973 | 211.9 | 864.7 | 68.3 | 7.96 | 2,624 | 2,057 | 1,133 | 1,660 | 924 | 1,031 | 567 | 882 | 18,910 |
| 1974 | 213.9 | 857.5 | 69.9 | 8.92 | 1,681 | 1,352 | 889 | 1,695 | 463 | 1,021 | 329 | 910 | 17,480 |
| 1975 | 216.0 | 874.9 | 71.1 | 9.00 | 1,384 | 1,171 | 896 | 1,645 | 275 | 1,000 | 213 | 952 | 19,180 |
| 1976 | 218.0 | 906.8 | 72.9 | 9.00 | 1,793 | 1,547 | 1,166 | 1,700 | 381 | 940 | 246 | 966 | 20,580 |
| 1977 | 220.2 | 942.9 | 74.1 | 9.02 | 2,279 | 2,002 | 1,452 | 1,720 | 550 | 930 | 277 | 1,000 | 19,760 |
| 1978 | 222.6 | 988.8 | 76.0 | 9.56 | 2,312 | 2,036 | 1,433 | 1,755 | 603 | 902 | 276 | 1,010 | 20,790 |
| 1979 | 225.1 | 1,015.7 | 77.3 | 10.78 | 2,037 | 1,760 | 1,194 | 1,760 | 566 | 938 | 277 | 1,050 | 20,770 |
| 1980 | 227.7 | 1,021.6 | 80.8 | 12.66 | 1,535 | 1,313 | 852 | 1,740 | 461 | 979 | 222 | 1,060 | 20,450 |
| 1981 | 229.8 | 1,049.3 | 82.4 | 14.70 | 1,341 | 1,100 | 705 | 1,720 | 395 | 980 | 241 | 1,050 | 18,910 |
| 1982 | 232.1 | 1,058.3 | 83.5 | 15.14 | 1,312 | 1,072 | 663 | 1,710 | 409 | 990 | 240 | 1,040 | 18,140 |
| 1983 2/ | 234.2 | 1,095.4 | 83.9 | 12.57 | 2,008 | 1,712 | 1,068 | 1,725 | 644 | 942 | 296 | | 19,270 |
| 1984 2/ | 236.6 | | 85.4 | 12.38 | 2,046 | 1,751 | 1,080 | 1,780 | 655 | 914 | 295 | | |
| 1975 | | | | | | | | | | | | | |

1/ Effective rate (in the primary market) on conventional mortgages, reflecting fees and charges as well as contract rate and assumed, on the average, repayment at the end of 10 years. Rates beginning 1973 not strictly comparable with prior years. Estimates for 1950-62 based on multiple regression relationships linking new home mortgage interest rates to the prime interest rate and trend for the 1963 to 1981 period.

2/ Preliminary.

Sources: Disposable personal income and interest rates--Council of Economic Advisors. Economic Report of the President. annual, various issues. Number of households--U. S. Department fo Commerce, Bureau of the Census. Population Characteristics. Current Population Reports Series P-20.periodic, various issues. Number of new housing starts and mobile home shipments--U. S. Department of Commerce, Bureau of the Census. Housing Starts. Construction Reports Series C-20. monthly, various issues. Floor area of new housing starts and mobile homes--U. S. Forest Service estimates based on data from the Manufactured Housing Institute and U.S. Department, Bureau of the Census. Characteristics of New Housing. Construction Reports Series C-25. Annual supplement, various issues. Residential upkeep and improvements--U. S. Department of Commerce, Bureau of the Census. Residential Alterations and Repairs. Series C-50. Annual supplement, various issues.

The CHAIRMAN. Thank you very much.

I'd like to express a particular welcome to Senator Rockefeller. I think this is his first appearance on this committee since having been given this assignment. You are more than welcome here. We are heartened by your assignment to this committee and you are more than welcome.

Senator ROCKEFELLER. Thank you very much, Mr. Chairman.

The CHAIRMAN. Do you have any questions?

Senator ROCKEFELLER. No, Mr. Chairman.

### USER FEE PROPOSAL

The CHAIRMAN. I just want to ask a couple other questions. We have two other agencies to hear here this morning, and therefore I will not go overlong, but I do want to get back to that question of user fees and the philosophy that may be there, because I'm a little concerned.

I guess we don't know exactly what the proposal will be because the proposal hasn't been developed. Am I correct?

Mr. MACCLEERY. We're in the process of putting it together and we also, as the Chief mentioned, have worked with a number of the national groups. I think they can speak for themselves, but they have been very interested and not negative on this idea. I think they see this in a time of generally declining budgets, as an opportunity to put recreation more on a par with the commodity uses of the national forests; we've received good comments from the people and we continue to work with the national groups and hope that we can put together a proposal that not only will work but can get fairly broad support.

The CHAIRMAN. When you're talking about raising fees, I think you indicated that the budgetary figure submitted to us reflected not a new concept of fee use. You're working on two different tracks. One is the increase of the fees that are now charged, the increase in the dollar amount.

Mr. MACCLEERY. That's the more limited approach.

The CHAIRMAN. Is that the approach from which the budget figure is derived that is submitted to us?

Mr. MACCLEERY. That is correct.

The CHAIRMAN. Now in order to get some idea, is that a doubling of fees?

Mr. MACCLEERY. It would be somewhat less than that. We collect $11 million or $12 million in recreation fees now, and this would be an increase of $25 million.

The CHAIRMAN. Tripling the fees?

Mr. MACCLEERY. Not necessarily. It would be more areas that would come under it; more developed campgrounds, more recreational sites would come under it.

The CHAIRMAN. I think your experience before on some of the low-fee use areas was that it cost you more to collect than what you collected. Now you've gone to an honor system at a number of forest campgrounds or picnic areas, particularly day use areas.

Mr. MACCLEERY. Right, and we would continue that approach.

The CHAIRMAN. That honor system hasn't worked very well, has it? Do you get some money?

Mr. MacCleery. I think it has worked quite well in some areas.

The Chairman. Well, it's worked well from the standpoint that you get more money than you would if you hadn't done it; is that right?

Mr. MacCleery. Well, that's true.

The Chairman. Have you approached it from the standpoint that maybe your costs of administering would go down if you fired some people? I didn't think you had thought of that. If you fired some people instead of hiring people to collect fees—just don't hire them—and keep your costs down, then you wouldn't have the need for so much revenues.

Mr. Peterson. In fact, one of the things that will be in the proposal that comes to you is to allow volunteers to collect money. We have a lot of campground hosts in the campgrounds, but now we have a ruling from GAO that you cannot have volunteers collect money. Many times we have got highly skilled people that may be retired. You could have a retired regional forester out there under the rules not allowed to collect recreation fees.

So we're looking at the use of volunteers and other approaches to do that.

The Chairman. I salute that, but I tell you, one of the things that bothers me is that if the fee use is low enough, your revenues in a particular area really don't justify hiring somebody to collect the fee. If you don't have somebody there to collect the fee, you don't collect much. Now you'll collect from some, but you don't collect uniformly.

I really am not certain that I am convinced of the utility of it. Now you can raise the fee to a high enough level that it then does pay you to hire somebody to collect the fee, but as you do that, your costs go up and the costs to the consumer go up dramatically as well because now you have a salary to cover.

So I see a great deal of pressure to escalate the costs of recreation management just because you want to recover some money from recreation use.

Mr. Peterson. No, we don't plan to do that. In fact, we plan to go the other direction as much as we can.

The Chairman. Well, if you're going to triple the fee, you are going from $1.50 at a picnic area to $4.50?

Mr. Peterson. We don't charge for picnic areas now.

The Chairman. Yes, you do.

Mr. Peterson. Not generally.

The Chairman. Not generally, but I'll show you places where you do. Now maybe not generally, but I would assume that if indeed you are going to broaden the number of areas where you do collect, then you are going to have more next year than you have this year, if this policy goes into effect.

Mr. MacCleery. Our general policy for charging for a campsite is to charge what the market seems to indicate based on facilities that are comparable. We have to make some adjustments because we're not directly comparable to private campgrounds, but by making that adjustment our policy is not to undersell or undercut the private commercial campground but to set our fees at what would be a market rate. We would not go above that.

What we're talking about is not just arbitrarily doubling the fee or tripling the fee, but using that constraint of having it comparable to what other facilities are, then expanding it to the areas that we don't now collect fees on.

The CHAIRMAN. Let me shift from that. As troublesome as that is, we have indeed dealt with that over the last 20 years. I have only been here 18 of those 20, and it's been a problem ever since I have been here. Congress has been up the hill and down the hill and around the hill on that issue, and eventually evolved to the kind of structure we have now that says if you make your capital investment and there is a specific use there, charge a fee that is related to the amount of capital investment you have made.

At a flood control reservoir, don't charge for the water but charge for the boat ramp, as an example. That kind of policy has evolved over the years.

The estimates of use and the estimates of revenues have always exceeded what we actually experienced, but when you go the next step and then say that we're going to now go to market value on those things, I think that's a kind of a catchword in this administration which is much overused and that will be much resisted when it comes to the recreational uses on the public lands.

### ENTRANCE FEES

But putting, that aside, when you start talking about charging entrance fees to national recreation areas, as an example, I would agree with my friend from Washington, who expresses great skepticism about the utility of attempting such a practice. I guess that people who don't live in a public land State can't quite appreciate how the people who do live there view something of this nature.

Two-thirds of my State is under Federal ownership. It is interspersed with private ownership. Communities are surrounded by public lands. Daily excursions occur across public lands, not just recreation activities, but business activities. State highways run through the public lands. Almost every citizen of my State will have contact with a public land at least on a weekly basis, and many of them on a daily basis.

What are you going to do with somebody who lives in a community where every activity of their life, on a daily basis, has some use of the public lands? I say only half fictiously that your attempt to charge an entrance fee to the use of the public lands will be the greatest boon to the National Rifle Association they have ever had, because every one of our citizens is going to want to own a gun.

I say that only half fictiously because if you think the sagebrush rebellion is over, you will find it's only nascent. Now Jim Watt may have killed it, the sagebrush revolution, but I suggest it is still in the background and that if any kind of heavyhanded administration—and that's the way it will be regarded—any attempt to charge the people who live at those lands for their recreational use of those lands is simply not going to sell in the West.

Now in New York City or in Michigan or in the urban areas of this country where they are used to that sort of thing, where they don't expect anything different, I suspect they'll accept it. But that's not the way the people in the West live, and they're not going to accept it willingly, and it will take an army, it would take an army to enforce it. And if you're going to pass a law that you don't intend to enforce, it becomes very unjust in its application.

I hope that when you get around to sending a bill up that you will not attempt something of that nature. I know that last year you sent a bill up and couldn't even get anybody to introduce it for you. I know I wouldn't.

Mr. MacCleery. Well, I understand what you're saying. I lived myself many years in the West in a public land State and I know very well. I have lived in several small towns surrounded by National Forests and public lands, and I know just what you are saying. I understand the sensitivity there, and we need to take that into account and put something together that is not going to create a huge backlash of resentment.

The Chairman. You mentioned recreation areas, and that may raise the concept in the minds of some people that you have here a park which has been developed and created for the public recreation use. What you have is hundreds of thousands of acres that embrace communities and a whole host of activities. It is not a national park. It is not a recreation area like going to Coney Island or to Disney World, in which you would expect to pay for entrance because it's a commercial activity.

I just can't overstate my own concern that indeed this administration may be moving in a direction which will reignite a great deal of hostility between the citizens in these public land States and the Government which is supposed to serve them.

Are there any further questions at this time? We will have some questions to submit for the record.

### NATIONAL FOREST SYSTEM REVENUES

Senator Evans. I have some questions to submit for the record, but I had an important one that I overlooked when we got into the discussion on housing starts.

It does relate to what evolves out of that, and that is the revenues that come to the National Forest System. Your estimates, which I understand are still in the materials you submitted for this budget request, for 1985 are for $1,046 million. We're almost 6 months into that fiscal year. Is that your current estimate of what's going to happen, or do I understand correctly that there is a significant reduction in that estimate?

Mr. Peterson. Our best estimate is that at the time we originally looked at these numbers a couple of months ago to update them we were looking at about $830 million, maybe, directly from timber, but to that our best estimate at this time is about $192 million from the turnback, which, as I have indicated, is a difficult number.

So if you asked us today what our best estimate would be, it's about $30 million less than that. So we would estimate that timber revenues is probably about $810 million instead of what we originally estimated at $834 million. So if you add the turnback money and then money from oil and other royalties, then we are probably about $30 million less than what you saw in the budget.

Senator EVANS. So your $1,046 million is composed of your originaly $834 million from timber sales?

Mr. PETERSON. Yes.

Senator EVANS. Plus the remainder of $212 million from those other receipts of various kinds?

Mr. PETERSON. Yes.

Senator EVANS. And you still expect that—and that included how much in the way of turnbacks out of that $212 million? That was $192 million?

Mr. PETERSON. $192 million.

Senator EVANS. OK; and you still think that you will be within $30 million of that total of $1,046 million?

Mr. PETERSON. That's correct. But I have pointed out that the turn-back number could be soft. It could be more or less than that. In the real world there may be $50 to $75 million of uncertainty here.

Senator EVANS. And that's all on the down side?

Mr. PETERSON. Most likely that would be the direction, although it could be higher.

Senator EVANS. Are you suggesting that it could be higher than $192 million?

Mr. PETERSON. Yes; as Mr. MacCleery has indicated, the regulations we have out now indicate that the Government is the financer of last resort. We don't know how many will fall under that criteria.

Mr. MACCLEERY. The buy-out charge that they make as a prerequisite for buying out is what will be, of course, counted as a receipt to the counties and shared on a 25-percent level, and so when those receipts come in will depend on either they will be paid immediately or they will be paid over a 5-year period, if they cannot qualify for private financing.

Senator EVANS. Does your $192 million estimate, would you say it is right in the middle, with a 50-percent chance that it will be higher and a 50-percent chance it will be lower, or would you suggest that the odds are a little different than that?

Mr. MACCLEERY. I think it's hard to put a confidence figure on it.

Senator EVANS. You've got to have some rationale for getting to the figure that you did. Is it on the high side or the low side, or it's in the middle?

Mr. PETERSON. It simply was our best estimate. We didn't inflate it or deflate it. It was our best estimate. And say if we miss, I would expect that there will certainly be lots of firms that will try to qualify for paying it out over five years.

Senator EVANS. Let me approach it just one other way and then, Mr. Chairman, I think we've got to get on, but of the $192 million you expect this year, how much has already come in?

Mr. PETERSON. None has come in now because the buy-out's not effective yet.

Senator EVANS. So it's all happened in the last 6 months?

Mr. PETERSON. That's why I say it's a difficult figure to come by. We don't even know what sales are going to be turned in yet.

Senator EVANS. OK.

The **CHAIRMAN**. Thank you, Senator Evans. Thank you, Mr. Secretary, and thank you, Mr. Peterson. We appreciate your testimony this morning.

The questions will be submitted for responses in writing. We would hope for prompt responses to those questions when submitted.

Mr. **PETERSON**. We'll do that. Thank you.

The **CHAIRMAN**. Thank you very much. I would say to the members if we could have the questions submitted by the close of business today, that would expedite the business of the committee in trying to arrive at a budget submission.

Our next witness is Mr. Raymond J. O'Connor, Chairman of the Federal Energy Regulatory Commission.

The Commission serves a significant role in assuring the viability of our country's energy supply system, particularly regarding natural gas and electricity. There are several issues that are of particular concern to me this morning, that I would like to highlight before you start your testimony, Mr. O'Connor.

The ability of the Commission to act expeditiously is, more than many agencies, contingent on an adequate number of qualified staff. From this perspective, I note that the Commission's fiscal year 1986 budget assumes that the President's proposed 5 percent cut in salaries is enacted by the Congress.

However, if this proposal is not approved by the Congress, the implication is that the Commission would have to absorb the 5-percent difference in personnel costs during a critical period. This is of concern to me.

Another area of concern to me is the Commission's proposed cluster impact assessment procedure for reviewing the environmental aspects of hydroelectric development. This proposed procedure was the subject of a January 9 letter to you from myself and six other Senators which urged the Commission to take time to solicit the views of interested persons as to the effect of the proposed procedure.

[The letter follows:]

JAMES A. McCLURE, IDAHO, CHAIRMAN

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LOWELL P. WEICKER, JR., CONN.
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MALCOLM WALLOP, WYO.
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D. MICHAEL HARVEY, CHIEF COUNSEL FOR THE MINORITY

United States Senate

COMMITTEE ON
ENERGY AND NATURAL RESOURCES
WASHINGTON, D.C. 20510

January 9, 1985

The Honorable Raymond J. O'Connor
Chairman
Federal Energy Regulatory Commission
825 North Capitol Street, N. E.
Washington, D. C. 20426

Dear Mr. Chairman:

On December 20, 1984, the Commission issued a Directive to Staff relating to the development of a Commission procedure for assessing the environmental impacts of multiple proposed hydroelectric projects in various river basins. The Commission has instructed the staff to refine further a "cluster" concept by preparing a plan of action to implement a "cluster impact assessment procedure" for license applications in three river basins, the Owens, Snohomish and Salmon. The staff has been directed to submit a report, along with options and recommendations, by January 15, 1985, so that the Commission can decide at its January 24, 1985, meeting whether the staff's recommended "cluster" approach should be implemented for those three river basins.

We are concerned about the lack of adequate time all interested parties will have to fully review, analyze and comment on the proposed Commission action. Use of a "cluster" approach raises many significant issues, such as: the appropriateness of the "cluster" concept; the methodology for selecting the specific basins that would be subject to a "cluster" approach; and the applicability of the "cluster" approach nationwide. Implementation by the Commission of a plan of action without adequate review and comment by all interested parties could increase the potential for additional litigation and further delays in hydroelectric development.

Accordingly, we urge that prior to final action on the staff report, the Commission provide a reasonable period of time to solicit and receive the views of the industry, the environmental community, and other interested parties on the effect of the adoption and implementation of the staff report. We note that many of the pending hydroelectric project applications, because of their nature or location, would not be subject to the "cluster" approach.

We would presume, therefore, that Commission consideration of those applications will continue as rapidly as possible on a case-by-case basis.

Sincerely,

Jim McClure

J. Bennett Johnston
Ranking Minority Member

James A. McClure
Chairman

Daniel J Evans

Daniel J. Evans
United States Senator

Slade Gorton
United States Senator

Steve Symms

Steven D. Symms
United States Senator

Max Baucus

Max Baucus
United States Senator

John Melcher

John Melcher
United States Senator

cc: Georgiana Sheldon
Anthony G. Sousa
Oliver G. Richard III
Charles G. Stalon

The CHAIRMAN. I might note for the record that the Commission did request comments on its proposal and the comment period closed yesterday. The letter also urged the Commission to continue processing as rapidly as possible those projects that would not be subject to this procedure.

I am of the opinion that the Commission should process all hydroelectric applications on a case-by-case basis, as has been the Commission's practice in the past. Obviously—and I state this for emphasis—obviously, the environmental consequences of development must by law be considered by the Commission in the licensing process.

The question is not whether that will be done, but whether or not it will be do~~ne on~~ a case-by-case basis on each license application as it comes before the Commission instead of grouping applications together for joint consideration.

Before turning to Mr. O'Connor for testimony, Mr. Evans, do you have any opening comments or statement?

Senator EVANS. No, Mr. Chairman, and unfortunately I am going to have to leave before we get completed. But when we do get to questions I have one set of questions on an important element that I would appreciate the opportunity to ask of Mr. O'Connor.

The CHAIRMAN. Senator Rockefeller?

Senator ROCKEFELLER. No statement.

The CHAIRMAN. Mr. O'Connor, we have your statement and it will be placed in the record in full. I would invite you to summarize so that perhaps we can give Senator Evans the opportunity to ask questions before he has to leave.

## STATEMENT OF HON. RAYMOND J. O'CONNOR, CHAIRMAN, FEDERAL ENERGY REGULATORY COMMISSION

Mr. O'CONNOR. Yes, sir. Good morning, Mr. Chairman, members of the committee. I would like to try to summarize in 3 or 4 minutes the testimony which has been prepared and has been submitted to you.

I am accompanied today by Mr. William McDonald, the Executive Director of the Commission, and by the directors of the Commission's legal and technical offices, who may assist me in answering questions.

As to our general budget overview, the 1986 budget request is for $95.6 million, of which $66.1 million should be offset through the collection of annual charges and fees. While this request is virtually the same as the current appropriation, there are five major new assumptions in our proposed fiscal year 1986 budget, one of which is the 5-percent assumption which you referred to in your comments.

There is $1.7 million for environmental studies in the Hydroelectric Licensing Program, and the other significant one is $66 million in fees and annual charges revenue for fiscal year 1986. I would like to emphasize that the Commission is making every effort to control operating costs.

Accordingly, the budget request represents what I consider to be a minimum funding level for fiscal year 1986. A year ago when I was before this committee I stressed that one of my goals at the

FERC was to improve the agency's management. I had to go to considerable effort to achieve this goal over the past year and we have made considerable progress in tracking and assigning responsibility for each workload item as well as establishing and meeting target dates for items requiring Commission action.

We still have a way to go, but I am convinced that these efforts will assist us measurably in managing the Commission's workload over the coming months.

The net result of these and other management improvements, such as automated compliance and rate model systems, is a considerable increase in staff productivity. For fiscal year 1984, productivity increased some 20 percent over fiscal year 1983. To maintain that effort, I have directed each of the Commission's office directors to achieve a 5-percent productivity improvement in programs for fiscal year 1985 and again in fiscal year 1986.

Let me just touch briefly on the four areas of our concern. The Hydrolicensing Program has been the subject of three major court decisions over the past year. Those are detailed in the prepared statement. These decisions have necessitated a reconsideration of many long-held principles and assumptions underlying the long history of the Commission's Hydrolicensing Program.

During the past year, I have devoted considerable effort to reviewing the impact of these decisions on our existing approach and seeking ways to maintain an administrative approach that is smooth and efficient yet legally sound and which will withstand judicial scrutiny and review. We are making progress, but I have to admit that much remains to be done.

In the electric area last year I stressed my commitment to expediting the processing of wholesale electric rate applications. During this past year we have made considerable progress in this area, and that has significantly led to the 20-percent productivity improvement during fiscal year 1984.

Significant improvement in staff productivity, streamlined decision processes, establishment of priorities, and the continued implementation of our information tracking system have yielded higher quality and more timely decisions in electric power cases.

In natural gas, a year ago the area was clouded with considerable uncertainty as we began to approach phased wellhead decontrol on January 1, 1985. I emphasized then my commitment to reviewing an array of options that could be taken to assist the industry and the public in adjusting to the phased removal of wellhead price controls.

Today, as I think we all know, the congressional mandate under the NGPA is being implemented without the so-called fly-up in prices that many feared just a short time ago. Competitive pressures from the marketplace appear to be resulting in stable or declining wellhead prices following removal of controls on approximately half of the Nation's gas supplies.

While some of the uncertainty associated with wellhead decontrol is beginning to dissipate, many more issues must be faced, including the question of how wellhead decontrol will affect the Commission's regulation of interstate pipeline sales and transportation. Accordingly, we are now in the process of conducting a detailed inquiry into these fundamental areas. We completed, week before last, 2 full days of public conference, and we have 2 more full days about 1 month hence looking into and inquiring into these areas.

In summary, our budget request reflects my commitment to improving management and increasing productivity. I appreciate the support of this committee and will be pleased to answer any questions you may have at this time.

[The prepared statement of Mr. O'Connor and the FERC fiscal year 1986 congressional budget request submitted by Senator McClure follow:]

STATEMENT OF
RAYMOND J. O'CONNOR
CHAIRMAN, FEDERAL ENERGY REGULATORY COMMISSION
BEFORE THE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

March 1, 1985

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I appreciate this opportunity to discuss the Federal Energy Regulatory Commission's FY 1986 budget request with you. I am accompanied today by William G. McDonald, the Executive Director of the Commission, and by the directors of the Commission's legal and technical offices who may assist me in answering your questions.

This morning, after presenting you with a brief overview of the Commission's FY 1986 budget request, I would like to provide you with a status report on the managerial and regulatory initiatives taken over the last year. In that context, I will also relate some of my expectations for the remainder of fiscal year 1985 and discuss our budget request for FY 1986.

## FY 1986 Budget Overview

The FY 1986 budget request is for $95.6 million of which $66.1 million would be offset through the collection of annual charges and fees.

While this request is virtually the same as the current appropriation, there are five major new assumptions in our proposed FY 1986 budget:

1. The FY 1986 budget request assumes congressional approval of a five percent reduction in federal employees' pay levels. This is a very significant factor since 66 percent of the FERC budget goes towards employee compensation. If Congress does not approve this reduction, FERC will need an additional $3.3 million in order to avoid serious disruption of our programs.
2. As a part of the Administration's initiative, the FY 1986 budget request includes reduced or frozen costs in several of the administrative areas in order to offset inflationary costs. For example, we anticipate that the GSA-controlled rent will be frozen at FY 1985 levels. Travel will be reduced by 10 percent from FY 1985 levels, and supplies and materials spending will be reduced by 18 percent.
3. Staffing and funding reductions are budgeted for in the natural gas regulation program. Because of the current surplus in natural gas markets, we project a stable workload. Increased productivity should allow for timely completion of natural gas workload items.
4. Funding for the hydropower licensing program, especially environmental studies, is requested at a higher level than budgeted for in FY 1985. We will require an increase of $1.7 million for environmental studies for a

total of $2.7 million, as a result of recent court decisions that dictate more extensive environmental review of proposed projects. Additionally, as a result of the Tulalip decision, we are experiencing a decrease in exemption applications and a corresponding increase in more labor-intensive license applications in FY 1985.

5. Finally, the FERC estimates that fees and annual charges revenue will increase to approximately $66 million in FY 1986. Existing fees and charges will generate approximately $50.0 million in revenue; the balance is to be derived from proposed rulemakings and new annual charges legislation which should be submitted to Congress shortly.

## Fee Revenue

The FY 1986 budget request presupposes a large increase of fee and annual charges revenue. This revenue is applied to the FERC appropriation and, thereby, reduces our net appropriation. The most prominent effort in increasing revenue is new annual charges legislation. Under present law, only hydropower licensees pay annual charges. These annual charges are apportioned to license holders based on the FERC's costs of implementing the Federal Power Act. The new annual charges legislation, which should be submitted shortly to the Congress, would give FERC similar authority to impose annual charges on jurisdictional natural gas pipelines, oil pipelines, and electric utilities based on the costs to FERC of administering these programs.

Under this approach, the burden of the costs of the Commission would be shifted away from the general taxpayer. It is important to realize, however, that, as the FERC moves towards even greater cost recovery, the full budget of the Commission will still be reviewed annually by the Congress.

It must be emphasized that the Commission is making every effort to control operating costs. But as indicated on Attachment A, some 83 percent of the budget request is for fixed expenses, including salaries, benefits, and direct support costs. The remainder will be used to pay for energy data support provided by EIA and for program and technical contract support. Accordingly, the budget request represents what I consider to be a minimum funding level for FY 1986.

## Improving Agency Management

One year ago I stressed before this Committee that one of my goals at the FERC was to improve agency management. My commitment to this goal is only reinforced by the continuing need to bring federal spending more in line with tax revenues. We must continue to apply sound managerial principles to government in order to increase productivity and better utilize those resources which are available to us.

During the last year I have devoted considerable effort to this goal. One year ago I described initiatives to establish an agenda forecasting system to provide a target date for each item requiring Commission consideration and to establish priorities for all pending rulemaking dockets.

While we have made progress in establishing -- and meeting -- target dates, progress in this area has not been as rapid as I hoped one year ago. Progress is being made, however, and I believe that these efforts will assist us measurably in managing the Commission's workload over the coming months.

With regard to rulemaking priorities, I am happy to report that action was taken on approximately 90 percent of the priority rulemaking proceedings during calendar 1984. Following last year's approach, we are now in the final stages of establishing priorities and schedules for approximately 30 additional proceedings which will be completed in an orderly fashion during calendar 1985.

Increased use of computerization has also played an important role in improving agency management. For example, the Management Information System is being "fine-tuned" and continues to be an important tool for managing the workload at the FERC. Expanded computerization tells us where every piece of information is -- from filings to congressional correspondence -- as well as who is responsible for processing this information at each milestone.

Advanced technology has enabled us to put in place a sophisticated Hydrolicense Compliance Tracking System for monitoring licensees' compliance with the safety and environmental conditions stipulated in their licenses. We are also putting in place a pilot program to automate natural gas pipeline rate computations that should enhance significantly the staff's ability to evaluate proposed settlement offers in pipeline rate cases.

The net result of these various management improvements has been a considerable increase in staff productivity. For FY 1984, productivity increased some 20 percent over FY 1983. This has resulted from my insistence that Commission managers make productivity their highest priority by focusing on progress in monthly management meetings and including productivity standards in SES performance contracts. To maintain that effort, I have directed each of the Commission's office directors to achieve a five percent productivity improvement in programs for FY 1985 and again in FY 1986. This productivity improvement has enabled us to propose a reduction in staffing in the natural gas and oil pipeline regulation programs at the same time as a reduction in pending workload. A summary of the Commission workload is appended as Attachment B, while the current distribution of resources among the program areas is depicted on Attachment C.

The Commission staff can be justifiably proud of these accomplishments as well as of the cost savings attained from several new initiatives. During 1984, we have lowered FERC operating costs by $2.8 million in administrative areas ranging from printing to telecommunications. For example, jurisdictional agency determinations are no longer printed in the Federal Register, saving the agency $300,000 annually. By purchasing telecommunications equipment that was already in place, we have avoided $340,000 in increased costs. By contracting out printing of the Commission's statutes and regulations through the Government Printing Office, we have realized an annual savings of $281,000. A comprehensive review of our distribution service lists will result in an estimated annual savings of $150,000. This is only a partial list, but it gives you some idea of the kinds of concrete, practical business initiatives we have implemented -- and will continue to implement -- to reduce administrative costs. These savings have allowed us to absorb inflationary cost increases rather than cut back on our regulatory programs.

I would like to turn now to some of the initiatives we have taken in specific program areas.

## Hydropower Licensing

The hydropower licensing program has been the subject of three major court decisions over the past year. Each of these three decisions -- in the Escondido, Tulalip, and Yakima cases -- has had a major impact on Commission hydropower operations.

The Supreme Court's Escondido decision rejected the idea that the Commission is a "one-stop" shop for hydropower licensing, emphasizing instead that authority over hydropower development is dispersed among several federal agencies. The Ninth Circuit's decision in the Tulalip case overturned the Commission's "natural water feature" rule, thus impairing the entire hydro exemption program. Finally, the Yakima case, also by the Ninth Circuit, limited the Commission's use of "open-ended" conditions to resolve project-related fish problems and would seem to require the preparation of an environmental impact statement prior to authorizing renewal of a license. These decisions have necessitated a complete reconsideration of many long-held principles and assumptions underlying the FERC's hydropower licensing program.

During the past year I have devoted considerable effort to reviewing the impact of these decisions on our existing approach and seeking ways to maintain an administrative approach that is smooth and efficient, yet legally sound. We are making progress, but much remains to be done. Significant accomplishments during the past year include the following:

1. Hydropower licensing was reorganized into an independent office, thereby reflecting the high priority of this program. Further changes to facilitate management oversight and staff accountability are contemplated. Moreover, the recent reorganization of the Office of the General Counsel is also expected to facilitate prompt legal analysis of hydropower issues.
2. The regulations and procedures governing the hydropower program have been extensively re-examined during the past year, and many changes -- both large and small -- have been made. The recently completed hydro licensing "clean-up" rule codifies many of these

changes and will no doubt bring about further efficiencies. Moreover, at our request an outside management consultant has examined the hydropower program and presented a plan of action comprising some 50 recommendations that are now being considered.

3. The Commission staff proposed a methodology for evaluating the environmental impacts associated with "clustered" projects that affect common natural resources. All interested parties have been given an opportunity to comment on the staff's proposal.
4. The Commission's 5 MW exemption program has been re-examined. In the Olympus case, the Commission reasoned that Congress intended to expedite these small projects by giving specified fish and wildlife agencies exclusive authority and responsibility over fish and wildlife matters, thereby relieving the Commission of the burden of performing duplicative and time-consuming analysis. Thus, those developers who are able to secure favorable fish and wildlife conditions will have their projects considered for exemption with a minimum of red tape at the Commission.
5. After the Tulalip decision curtailing use of the "natural water feature" exemptions, the Commission clarified the status of projects already exempted from licensing and announced its decision to consider future "natural water feature" exemptions on a case-by-case basis until new regulations can be issued. We

estimate that exemption applications will decline by 40 percent during fiscal year 1985, but, partly because of the Tulalip decision, applications for licenses will increase by 55 percent during that same period.

These are only some of the steps which must be taken to have a successful hydropower program. The existing program must be redefined in order to bring it in line with the holding in the Supreme Court's Escondido decision. Specifically, the Commission's resources must be directed away from those issues that are primarily the province of other agencies, and focused instead on those responsibilities that remain solely within the Commission's purview. Duplicative regulation should be avoided where possible. Accordingly, over the coming year, I anticipate taking action along the following lines:

1. We must continue discussions commenced with the Departments of Interior, Agriculture, and Commerce regarding overlapping authorities and responsibilities so that our agencies may avoid duplication and conflict. The Commission will continue a dialogue with the Northwest Power Planning Council regarding development in the Columbia River Basin.
2. Environmental analysis, rather than engineering analysis, is the critical factor limiting the speed of processing license applications. I intend to reallocate staff resources to reflect this fact.

3. The Commission's dam safety workload is growing rapidly because of the dramatic increase in the number of hydro projects regulated by the Commission. The productivity of the dam safety program must be increased: management initiatives and greater utilization of the computer support system are being considered.
4. The Commission must develop efficient procedures for evaluating competing proposals for new and existing hydro projects. Congress could help in this regard by spelling out the criteria that should be employed by the Commission during relicensing proceedings.

Electric Power Regulation

At last year's hearing, I stressed my commitment to expediting the processing of wholesale electric rate applications. During the past year we have made considerable progress in this area. Significant improvement in staff productivity, streamlined decisional processes, establishment of priorities, and the continued implementation of an information tracking system have yielded higher quality and more timely decisions in electric power cases.

A separate Office of Electric Power Regulation was created. Expedited rate case procedures were implemented. In particular, the new Office of Electric Power Regulation reduced the backlog of formal electric rate cases by approximately 50 percent in 1984. With the implementation of new procedures permitting administrative law judges to reconsider their initial decisions prior to full Commission action and with the scheduling of standard procedural dates for rate cases, a further reduction in the backlog is expected for 1985.

Generic approaches to ratemaking questions are another means of reducing decisional delay. The Commission has adopted a generic approach to calculating the cost of equity component of the allowed rate of return on jurisdictional operations. Beginning this year, the Commission will determine annually an estimate of the average cost of common equity for the electric utility industry. This so-called "benchmark" rate of return, which will be updated quarterly, will be the return allowed in individual rate cases unless an adequate showing can be made of a risk differential that warrants a reduced or higher return. To ensure the orderly implementation of this procedure, the generic rate of return will be advisory only for the first two years.

Another new ratemaking approach proposed by the Commission would calculate the working capital requirements of utilities on a generic basis. If a satisfactory approach to this issue could be adopted, it would help reduce the burdens of litigation and promote more accurate and consistent results.

To further reduce regulatory burdens, the Commission has revised the accounting requirements for electric utilities and reduced from four to two the number of size-related categories for reporting purposes. This will simplify and clarify utility reporting requirements and will better enable the Commission to tailor information reporting requirements to the size of utilities. To lessen the regulatory burden on applicants seeking authority to hold interlocking positions, the Commission redefined the types of information required. This approach is also intended to streamline evaluation and disposition of interlock applications.

In the area of federal rates, the Commission has issued final regulations for filing and review of the rate schedules of the five power marketing agencies. This will better enable the Commission to consider rate filings by power marketing agencies on a timely basis.

With respect to the Commission's bulk power and transmission jurisdiction, the Commission has implemented a two-year experiment to test whether its regulation of coordination transactions can be modified to achieve greater efficiency. The experiment also provides for the availability of transmission services upon request. Transmission services were also the focus of a report by the Office of Electric Power Regulation. Selected transmission rates were analyzed as part of a pilot program to provide better information to the public on the rates, terms and conditions found in existing service.

Alternative electric generation encouraged by the Public Utility Regulatory Policies Act of 1978 continued to develop at an increasing rate. Geothermal, solar, wind, hydroelectric, biomass, and waste resources are all contributing an increasing amount of the Nation's electricity needs. In addition, cogeneration has begun to reemerge as a significant national energy resource. Applications in these two areas rose to 541 in FY 1984, up from 249 in 1982. We anticipate perhaps 600 applications during the current fiscal year, then a decline to approximately 550 during FY 1986 as available tax incentives expire. Clearly, the PURPA program has been successful.

Thus, while 1984 was a year of progress in the area of electric regulation, 1985 portends an even heavier workload with continuing complex, controversial, and costly cases. The management initiatives undertaken to date will permit the Commission even greater progress in effectively exercising its statutory responsibilities in 1985.

## Natural Gas Regulation

A year ago, the natural gas area was clouded with considerable uncertainty as we began to approach phased wellhead decontrol on January 1, 1985. I emphasized then my commitment to reviewing an array of options that could be taken to assist the industry and the public in adjusting to the phased removal of wellhead price controls.

Today, I can report that the congressional mandate under the NGPA is being implemented without the price fly-up that many feared would result. Competitive pressures from the marketplace appear to be resulting in stable or declining wellhead prices following removal of controls on approximately half of the Nation's gas supplies.

The Commission has taken a number of steps over the last year to assist these developments. We took steps to eliminate existing pipeline tariff provisions which resulted in charging customers for gas which they did not purchase. This step allows for greater play of competitive forces in wholesale gas markets by making it somewhat easier for local distribution companies to "shop around" for cheaper gas. In addition, the Commission has made it easier for natural gas pipelines and producers to obtain marketing flexibility by acting expeditiously to approve special marketing programs which meet specified conditions.

Other steps taken over the past year include our approval of certain types of off-system and discount sales which allow gas to be sold at more competitive prices, subject, of course, to conditions imposed to ensure that the transactions also result in a net economic benefit to the pipelines' other customers.

While some of the uncertainty associated with wellhead decontrol is beginning to dissipate, many more issues must be faced, including the question of how wellhead decontrol will affect the Commission's regulation of interstate pipeline sales and transportation. Accordingly, we are now in the process of conducting a detailed inquiry into these fundamental areas. Further steps will be taken as appropriate during the remainder of this year.

While partial wellhead decontrol appears to be bringing advantages to customers in terms of stable or declining prices, decontrol does not necessarily translate into a significant decrease in the Commission's regulatory responsibilities. Under the NGPA, producers must continue to file for and obtain determinations from the applicable state agencies in order to qualify new wells for decontrol. Under applicable law, the Commission must continue to review these determinations. While our workload in this area is leveling off, this results more from the decline in drilling due to the current gas surplus than from removal of wellhead price controls. As a result of this stabilizing workload -- coupled with increased staff productivity -- we anticipate reducing staff in the natural gas program area while also reducing our pending natural gas workload by some 27 percent from the FY 1984 level.

## Oil Pipeline Regulation

The Commission's request totals $4,113,000 in the Oil Pipeline Regulation Program. Responsibilities extend to approximately 150 common carrier oil pipelines and include the establishment of transportation rates that are fair to shippers and consumers and that also supply adequate incentives for the maintenance of oil pipeline systems. In FY 1986 it is projected that 2,102 workload items will be completed. Pending workload will decline to 291 items.

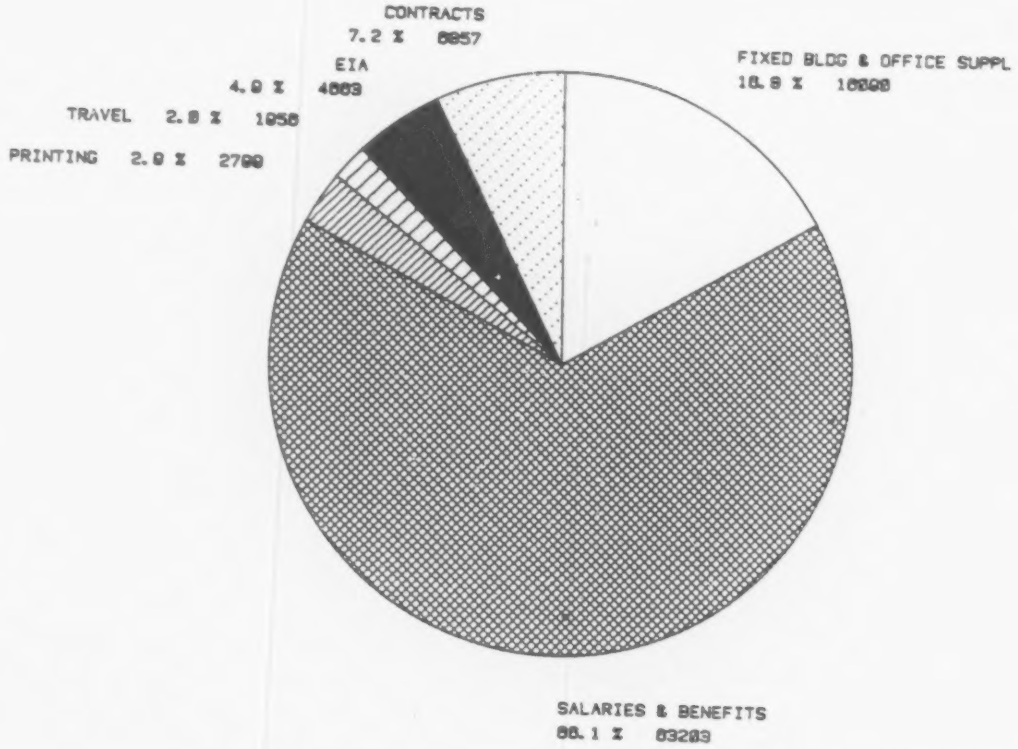
Another of the FERC's responsibilities in the oil pipeline program is to consider remedial orders referred from the Department of Energy under section 503 of the Department of Energy Organization Act. In September 1984, I streamlined the Commission's handling of these cases by merging the Office of Opinions and Review into the Office of the General Counsel. In addition, I have directed the General Counsel to take necessary steps, including increasing the staff allocated to handling these cases, in order to process all of the cases pending at the FERC by the end of calendar year 1985.

## Summary

In summary, our budget request reflects my commitment to improving management and increasing productivity. I appreciate the support of this Committee and will be pleased to answer any questions you may have at this time.

ATTACHMENT A

## COMPOSITION OF FERC FUNDING
## ($000'S)



TOTAL - $95,568

ATTACHMENT B

# FEDERAL ENERGY REGULATORY COMMISSION
## Workload Summary*

| | RECEIPTS | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | ACTUAL | | | | | | ESTIMATE | |
| | FY 79 | FY 80 | FY 81 | FY 82 | FY 83 | FY 84 | FY 85 | FY 86 |
| HYDROPOWER LICENSING | 301 | 691 | 2,400 | 2,000 | 1,000 | 1,597 | 1,800 | 1,300 |
| DAM SAFETY | 1,177 | 1,200 | 1,200 | 1,400 | 1,000 | 1,047 | 2,000 | 2,130 |
| ELECTRIC POWER | 974 | 1,100 | 1,340 | 1,441 | 1,097 | 1,080 | 1,088 | 1,010 |
| SECURITIES | 70 | 80 | 69 | 80 | 74 | 70 | 87 | 88 |
| PRODUCER RATES | 7,213 | 4,700 | 2,511 | 3,000 | 2,300 | 2,404 | 2,000 | 2,010 |
| PRODUCER CERTIFICATES | 1,400 | 1,000 | 960 | 931 | 1,040 | 1,100 | 1,000 | 900 |
| OIL PIPELINE | 2,088 | 2,200 | 3,360 | 2,790 | 3,070 | 1,272 | 2,100 | 2,101 |
| PIPELINE CERTIFICATES | 945 | 1,101 | 1,300 | 1,007 | 990 | 1,084 | 970 | 990 |
| PIPELINE RATES | 1,308 | 1,700 | 1,800 | 1,084 | 2,214 | 2,000 | 2,160 | 3,200 |
| SUBTOTAL | 15,410 | 14,210 | 15,004 | 16,261 | 14,433 | 13,080 | 15,240 | 14,000 |
| WELLHEAD PRICING | 20,400 | 60,080 | 61,110 | 62,340 | 64,801 | 66,103 | 54,030 | 54,010 |
| TOTAL | 35,801 | 68,310 | 76,720 | 78,000 | 79,013 | 80,101 | 69,070 | 68,404 |

| | TOTAL WORKLOAD | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | ACTUAL | | | | | | ESTIMATE | |
| | FY 79 | FY 80 | FY 81 | FY 82 | FY 83 | FY 84 | FY 85 | FY 86 |
| HYDROPOWER LICENSING | 972 | 1,480 | 3,200 | 3,437 | 3,000 | 3,160 | 3,000 | 3,700 |
| DAM SAFETY | 1,177 | 1,200 | 1,060 | 1,405 | 1,000 | 1,047 | 2,000 | 2,130 |
| ELECTRIC POWER | 1,380 | 1,000 | 2,000 | 2,100 | 2,000 | 2,000 | 2,071 | 1,013 |
| SECURITIES | 88 | 107 | 108 | 80 | 84 | 81 | 107 | 102 |
| PRODUCER RATES | 17,800 | 8,200 | 6,000 | 5,400 | 4,000 | 3,400 | 3,387 | 3,040 |
| PRODUCER CERTIFICATES | 4,010 | 3,300 | 1,807 | 1,313 | 1,317 | 1,420 | 1,300 | 1,174 |
| OIL PIPELINE | 2,175 | 2,410 | 3,000 | 5,000 | 4,021 | 1,804 | 2,400 | 2,300 |
| PIPELINE CERTIFICATES | 1,040 | 1,000 | 1,000 | 1,080 | 1,400 | 1,010 | 1,300 | 1,400 |
| PIPELINE RATES | 1,877 | 2,100 | 3,004 | 3,300 | 2,723 | 2,400 | 3,000 | 3,073 |
| SUBTOTAL | 31,300 | 30,720 | 21,080 | 23,300 | 21,800 | 18,840 | 19,001 | 18,700 |
| WELLHEAD PRICING | 20,420 | 74,080 | 73,217 | 78,000 | 81,310 | 82,310 | 73,210 | 69,801 |
| TOTAL | 84,710 | 87,380 | 94,040 | 101,300 | 103,300 | 100,800 | 93,043 | 89,407 |

| | COMPLETIONS | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | ACTUAL | | | | | | ESTIMATE | |
| | FY 79 | FY 80 | FY 81 | FY 82 | FY 83 | FY 84 | FY 85 | FY 86 |
| HYDROPOWER LICENSING | 357 | 690 | 1,804 | 2,130 | 1,807 | 1,800 | 1,805 | 1,200 |
| DAM SAFETY | 1,177 | 1,200 | 1,200 | 1,400 | 1,000 | 1,047 | 2,088 | 2,130 |
| ELECTRIC POWER | 685 | 970 | 1,313 | 1,807 | 1,874 | 1,080 | 1,073 | 1,877 |
| SECURITIES | 73 | 90 | 87 | 80 | 80 | 70 | 88 | 88 |
| PRODUCER RATES | 14,684 | 6,340 | 3,800 | 4,267 | 3,000 | 2,801 | 2,033 | 3,871 |
| PRODUCER CERTIFICATES | 2,300 | 2,010 | 1,200 | 1,040 | 1,001 | 1,132 | 1,060 | 990 |
| OIL PIPELINE | 7,990 | 1,817 | 2,341 | 3,007 | 4,080 | 1,204 | 2,110 | 2,160 |
| PIPELINE CERTIFICATES | 930 | 1,274 | 1,101 | 1,116 | 879 | 1,004 | 1,057 | 1,090 |
| PIPELINE RATES | 1,166 | 1,700 | 1,640 | 1,800 | 2,177 | 2,730 | 2,160 | 3,273 |
| SUBTOTAL | 20,790 | 16,000 | 14,080 | 16,160 | 17,947 | 14,300 | 15,004 | 15,884 |
| WELLHEAD PRICING | 10,040 | 62,067 | 57,027 | 60,007 | 65,450 | 63,657 | 58,396 | 55,110 |
| TOTAL | 30,434 | 75,407 | 72,160 | 77,108 | 82,537 | 77,991 | 73,097 | 71,180 |

| | PENDING WORKLOAD AT END OF FY | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | ACTUAL | | | | | | | ESTIMATE | |
| | FY 78 | FY 79 | FY 80 | FY 81 | FY 82 | FY 83 | FY 84 | FY 85 | FY 86 |
| HYDROPOWER LICENSING | 941 | 615 | 776 | 1,396 | 1,316 | 1,376 | 1,387 | 1,499 | 1,800 |
| DAM SAFETY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ELECTRIC POWER | 814 | 490 | 690 | 717 | 601 | 694 | 476 | 390 | 380 |
| SECURITIES | 71 | 17 | 17 | 18 | 10 | 15 | 15 | 17 | 17 |
| PRODUCER RATES | 10,440 | 3,000 | 2,000 | 1,743 | 1,160 | 1,004 | 637 | 484 | 373 |
| PRODUCER CERTIFICATES | 3,134 | 2,214 | 701 | 290 | 271 | 288 | 904 | 349 | 180 |
| OIL PIPELINE | 150 | 166 | 682** | 1,744 | 2,040 | 330 | 360 | 390 | 381 |
| PIPELINE CERTIFICATES | 967 | 617 | 624 | 643 | 461 | 621 | 601 | 462 | 442 |
| PIPELINE RATES | 390 | 471 | 394 | 430 | 690 | 640 | 640 | 630 | 690 |
| SUBTOTAL | 16,070 | 8,611 | 6,901** | 6,909 | 7,101 | 4,940 | 4,290 | 3,077 | 3,782 |
| WELLHEAD PRICING | 0 | 6,774 | 12,160 | 15,000 | 17,030 | 16,126 | 18,000 | 15,000 | 13,000 |
| TOTAL | 16,070 | 15,386 | 19,129** | 22,000 | 24,160 | 20,672 | 22,900 | 18,000 | 17,394 |

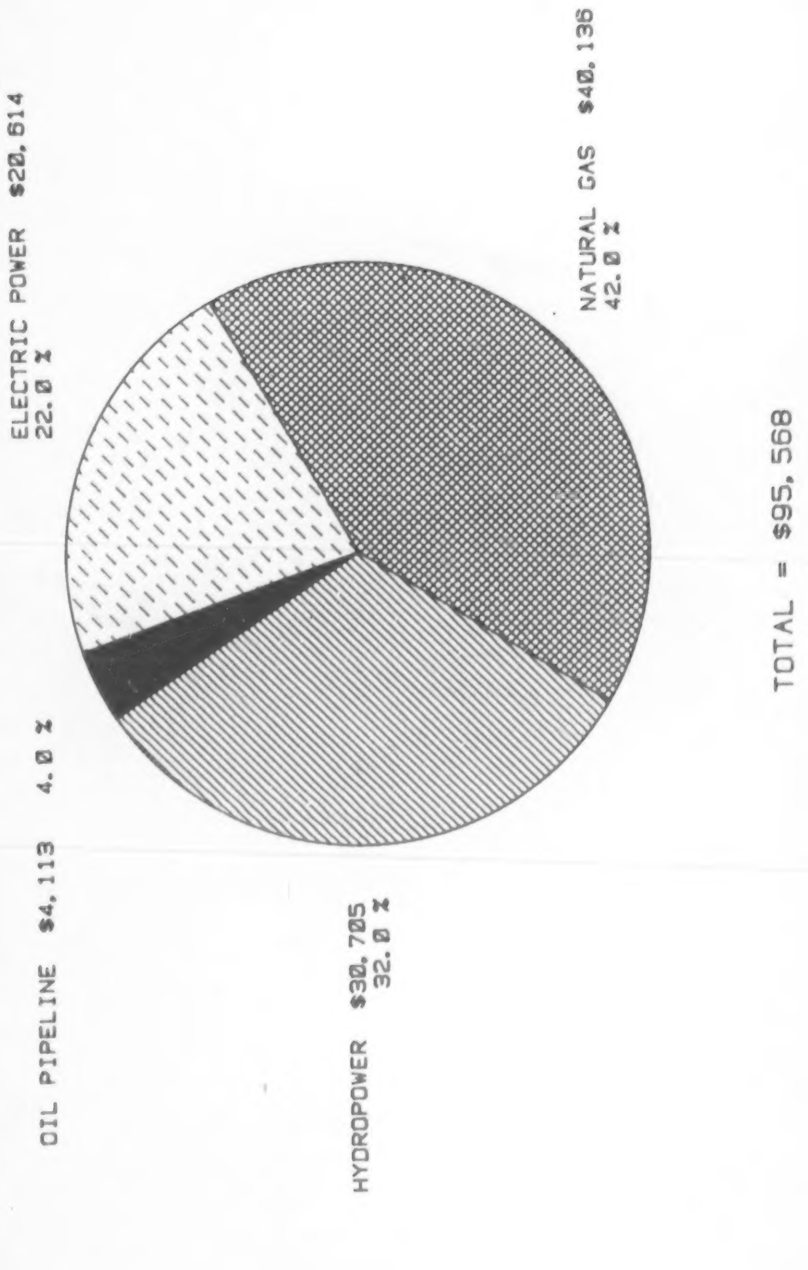
*DATA FOR FY 1985 AND 1986 ARE PROJECTED BASED ON DECEMBER 31, 1984, EDITION OF THE MANAGEMENT INFORMATION SYSTEM REPORT.

**ADJUSTMENT SHOWS ADDITION OF 22 TAPS FILINGS.

FEBRUARY 15, 1985

ATTACHMENT C

# FERC FY1986 PROGRAM DISTRIBUTION OF RESOURCES
($000'S)



Federal Energy Regulatory Commission
FY 1986 Congressional Budget Request

Summary of Programs

Operating Expenses

(Tabular dollars in thousands. Narrative material in whole dollars.)

| | FY 1984 Actual | FY 1985 Appropriation | FY 1986 Request |
|---|---|---|---|
| Natural Gas Regulation - Operating expenses | $41,626 | $45,435 | $40,136 |
| Hydropower Regulation - Operating expenses | 23,736 | 24,829 | 30,705 |
| Oil Pipeline Regulation - Operating expenses | 4,648 | 4,665 | 4,113 |
| Electric Power Regulation- Operating expenses | 18,239 | 20,748 | 20,614 |
| Total operating expenses | $88,249 | $95,677 | $95,568 |
| Estimated Offsetting Collections | -39,928 | -41,334 | -66,077 |
| Estimated Net Expenses | $48,321 | $54,343 | $ 29,491 |
| Staff Years | 1,645 | 1,678 | 1,659 |

Authorization:

| | |
|---|---|
| Natural Gas Regulation: | Natural Gas Act; Alaska Natural Gas Transportation Act; Natural Gas Policy Act; Public Utility Regulatory Policies Act; Department of Energy Organization Act; Outer Continental Shelf Lands Act; Energy Security Act; Crude Oil Windfall Profit Tax Act; Regulatory Flexibility Act; National Environmental Policy Act; and the National Historic Preservation Act. |
| Hydropower Regulation: | Federal Power Act; Public Utility Regulatory Policies Act; Flood Control and River and Harbor Acts; Reclamation Project Act; Water Resources Planning Act; Department of Energy Organization Act; Energy Security Act; Regulatory Flexibility Act; Crude Oil Windfall Profit Tax Act; Pacific Northwest Electric Power Planning and Conservation Act; Wild and Scenic Rivers Act; National Historic Preservation Act; Clean Water Act; National Environmental Policy Act; Coastal Zone Management Act; |

| | |
|---|---|
| | Fish and Wildlife Coordination Act; Endangered Species Act; Federal Pollution Control Act; and the Niagara Redevelopment Act. |
| Oil Pipeline Regulation: | Interstate Commerce Act; Department of Energy Organization Act; Regulatory Flexibility Act; Outer Continental Shelf Lands Act; Crude Oil Windfall Profit Tax Act; and the Deepwater Port Act. |
| Electric Power Regulation: | Federal Power Act; Public Utility Regulatory Policies Act; Powerplant and Industrial Fuel Use Act; Department of Energy Organization Act; Energy Security Act; Regulatory Flexibility Act; Crude Oil Windfall Profit Tax Act; Pacific Northwest Electric Power Planning and Conservation Act; Flood Control and River and Harbor Acts; Bonneville Project Act; Eklutna Project Act; Falcon and Amistad Dam Act; Federal Columbia River Transmission Act; Reclamation Project Act; Nuclear Waste Policy Act; National Environmental Policy Act; and the Public Utility Holding Company Act. |

Federal Energy Regulatory Commission
FY 1986 Congressional Budget Request

SUMMARY OF CHANGES
(Dollars in 000's)

| | |
|---|---|
| FY 1985 Appropriation | $ 95,677 |
| Adjustments To Base: | |
| FY 1986 effects of FY 1985 Pay Raise | + 2,268 |
| FY 1986 5% pay reduction | - 3,268 |
| Printing inflationary costs | + 110 |
| Program Changes: | |
| Reduced staffing for natural gas and oil programs (Includes reduced administrative support, EIA support, and supplies) | - 1,211 |
| Increased environmental studies | + 1,650 |
| Computer capacity upgrade | + 904 |
| General travel reduction (10%) | - 210 |
| Reduction in training program | - 352 |
| FY 1986 Budget Request | $ 95,568 |
| Less: Estimated Offsetting Collections | $-66,077 |
| Estimated Net Expenses | $ 29,491 |

Federal Energy Regulatory Commission
FY 1986 Congressional Budget Request

## Summary of Workload Receipts

| | FY 1981 | FY 1982 | FY 1983 | FY 1984 | FY 1985 Projected | FY 1986 Projected |
|---|---|---|---|---|---|---|
| NATURAL GAS REGULATION | 68,294 | 69,900 | 72,118 | 73,821 | 62,392 | 62,310 |
| Pipeline Certificate | 1,069 | 1,067 | 909 | 1,094 | 978 | 998 |
| Pipeline Rate | 1,690 | 1,894 | 2,214 | 2,890 | 3,159 | 3,253 |
| Producer Certificate | 906 | 931 | 1,046 | 1,160 | 1,005 | 925 |
| Producer Rate | 3,511 | 3,666 | 3,368 | 2,484 | 2,620 | 2,519 |
| Administration of Wellhead Pricing | 61,118 | 62,342 | 64,581 | 66,193 | 54,630 | 54,615 |
| HYDROPOWER REGULATION | 3,638 | 3,477 | 3,235 | 3,454 | 3,699 | 3,413 |
| Hydropower Licensing | 2,435 | 2,052 | 1,650 | 1,807 | 1,663 | 1,293 |
| Dam Safety Inspections | 1,203 | 1,425 | 1,585 | 1,647 | 2,036 | 2,120 |
| OIL PIPELINE REGULATION | 3,362 | 3,795 | 2,079 | 1,272 | 2,102 | 2,101 |
| ELECTRIC POWER REGULATION | 1,428 | 1,521 | 1,581 | 1,644 | 1,682 | 1,600 |
| TOTAL RECEIPTS | 76,722 | 78,693 | 79,013 | 80,191 | 69,875 | 69,424 |
| LESS--Jurisdictional Agency Determinations | 50,885 | 57,192 | 57,805 | 51,395 | 45,000 | 45,000 |
| | 25,837 | 21,501 | 21,208 | 28,796 | 24,875 | 24,424 |

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## Summary of Workload Completions

| | FY 1981 | FY 1982 | FY 1983 | FY 1984 | FY 1985 Projected | FY 1986 Projected |
|---|---|---|---|---|---|---|
| NATURAL GAS REGULATION | 65,515 | 69,227 | 73,123 | 71,464 | 66,431 | 63,986 |
| Pipeline Certificate | 1,151 | 1,118 | 879 | 1,054 | 1,057 | 1,038 |
| Pipeline Rate | 1,646 | 1,823 | 2,177 | 2,790 | 3,185 | 3,273 |
| Producer Certificate | 1,225 | 1,042 | 1,051 | 1,132 | 1,050 | 985 |
| Producer Rate | 3,866 | 4,247 | 3,526 | 2,851 | 2,833 | 2,571 |
| Administration of Wellhead Pricing | 57,627 | 60,997 | 65,490 | 63,637 | 58,306 | 56,119 |
| HYDROPOWER REGULATION | 3,027 | 3,547 | 3,172 | 3,475 | 3,561 | 3,403 |
| Hydropower Licensing | 1,824 | 2,122 | 1,587 | 1,828 | 1,525 | 1,283 |
| Dam Safety Inspections | 1,203 | 1,425 | 1,585 | 1,647 | 2,036 | 2,120 |
| OIL PIPELINE REGULATION | 2,241 | 2,697 | 4,599 | 1,294 | 2,110 | 2,102 |
| ELECTRIC POWER REGULATION | 1,400 | 1,685 | 1,643 | 1,662 | 1,758 | 1,662 |
| TOTAL COMPLETIONS | 72,183 | 77,156 | 82,537 | 77,895 | 73,860 | 71,153 |
| LESS--Jurisdictional Agency Determinations | 52,303 | 54,760 | 59,429 | 53,689 | 44,199 | 45,000 |
| | 19,880 | 22,396 | 23,108 | 24,206 | 29,661 | 26,153 |

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Summary of Pending Workload

| | FY 1980 | FY 1981 | FY 1982 | FY 1983 | FY 1984 | FY 1985 Projected | FY 1986 Projected |
|---|---|---|---|---|---|---|---|
| NATURAL GAS REGULATION | 16,016 | 18,795 | 19,468 | 18,463 | 20,820 | 16,781 | 15,105 |
| Pipeline Certificate | 624 | 542 | 491 | 521 | 561 | 482 | 442 |
| Pipeline Rate | 394 | 438 | 509 | 546 | 646 | 620 | 600 |
| Producer Certificate | 701 | 382 | 271 | 266 | 294 | 249 | 189 |
| Producer Rate | 2,098 | 1,743 | 1,162 | 1,004 | 637 | 424 | 372 |
| Administration of Wellhead Pricing | 12,199 | 15,690 | 17,035 | 16,126 | 18,682 | 15,006 | 13,502 |
| HYDROPOWER REGULATION | 774 | 1,385 | 1,315 | 1,378 | 1,357 | 1,495 | 1,505 |
| Hydropower Licensing | 774 | 1,385 | 1,315 | 1,378 | 1,357 | 1,495 | 1,505 |
| Dam Safety Inspections | -0- | -0- | -0- | -0- | -0- | -0- | -0- |
| OIL PIPELINE REGULATION | 623 | 1,744 | 2,842 | 322 | 300 | 292 | 291 |
| ELECTRIC POWER REGULATION | 707 | 735 | 571 | 509 | 491 | 415 | 353 |
| TOTAL PENDING WORKLOAD | 18,120 | 22,659 | 24,196 | 20,672 | 22,968 | 18,983 | 17,254 |
| LESS--Jurisdictional Agency Determinations | 7,732 | 6,314 | 8,746 | 7,122 | 4,828 | 5,629 | 5,629 |
| | 10,388 | 16,345 | 15,450 | 13,550 | 18,140 | 13,354 | 11,625 |

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NATURAL GAS REGULATION

Operating Expenses
(Tabular dollars in thousands. Narrative material in whole dollars.)

| | FY 1984 Actual | FY 1985 Appropriation | FY 1986 Request |
|---|---|---|---|
| Natural Gas Regulation | | | |
| Pipeline Certificate - Operating expenses | $13,382 | $14,611 | $13,232 |
| Pipeline Rate - Operating expenses | 15,788 | 17,411 | 16,684 |
| Producer Certificate - Operating expenses | 2,117 | 2,529 | 2,080 |
| Producer Rate - Operating expenses | 2,671 | 2,718 | 2,050 |
| Administration of Wellhead Pricing - Operating expenses | 7,668 | 8,166 | 6,090 |
| Natural Gas Regulation - Total operating expenses | $41,626 | $45,435 | $40,136 |
| Staff Years | 801 | 800 | 757 |

Authorization:

Natural Gas Regulation: Natural Gas Act; Natural Gas Policy Act; Alaska Natural Gas Transportation Act; Public Utility Regulatory Policies Act; Department of Energy Organization Act; Outer Continental Shelf Lands Act; Energy Security Act; Regulatory Flexibility Act; Crude Oil Windfall Profit Tax Act; National Environmental Policy Act; and the National Historic Preservation Act.

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HYDROPOWER REGULATION

Operating Expenses
(Tabular dollars in thousands. Narrative material in whole dollars.)

| | FY 1984 Actual | FY 1985 Appropriation | FY 1986 Request |
|---|---|---|---|
| Hydropower Regulation | | | |
| Hydropower Licensing Operating Expenses | $16,499 | $16,794 | $21,094 |
| Dam Safety Inspections - Operating Expenses | 7,237 | 8,035 | 9,611 |
| Hydropower Regulation - Total Operating Expenses | $23,736 | $24,829 | $30,705 |
| Staff Years | 450 | 448 | 460 |

Authorization:

Hydropower Regulation: Federal Power Act; Public Utility Regulatory Policies Act; Reclamation Project Act; Water Resources Planning Act; Flood Control and River and Harbor Acts; Department of Energy Organization Act; Energy Security Act; Regulatory Flexibility Act; Crude Oil Windfall Profit Tax Act; Pacific Northwest Electric Power Planning and Conservation Act; National Environmental Policy Act; Fish and Wildlife Coordination Act; Wild and Scenic Rivers Act; National Historic Preservation Act; Clean Water Act; Endangered Species Act; Coastal Zone Management Act; Federal Pollution Control Act and the Niagara Redevelopment Act.

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## OIL PIPELINE REGULATION

Operating Expenses
(Tabular dollars in thousands. Narrative material in whole dollars.)

|  | FY 1984 Actual | FY 1985 Appropriation | FY 1986 Request |
|---|---|---|---|
| **Oil Pipeline Regulation - Operating Expenses** | $4,648 | $4,665 | $4,113 |
| **Staff Years** | 79 | 82 | 77 |

Authorization:

Oil Pipeline Regulation: **Interstate Commerce Act; Department of Energy Organization Act Regulatory Flexibility Act; Outer Continental Shelf Lands Act; Crude Oil Windfall Profit Tax Act; and the Deepwater Port Act.**

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## ELECTRIC POWER REGULATION

Operating Expenses
(Tabular dollars in thousands. Narrative material in whole dollars.)

| | FY 1984 Actual | FY 1985 Appropriation | FY 1986 Request |
|---|---|---|---|
| Electric Power Regulation-Operating Expenses | $18,239 | $20,748 | $20,614 |
| Staff Years | 315 | 348 | 365 |

Authorization:

| | |
|---|---|
| Electric Power Regulation: | Federal Power Act; Public Utility Regulatory Policies Act; Powerplant and Industrial Fuel Use Act; Department of Energy Organization Act; Energy Security Act; Regulatory Flexibility Act; Crude Oil Windfall Profit Tax Act; Pacific Northwest Electric Power Planning and Conservation Act; Flood Control and River and Harbor Acts; Bonneville Project Act; Eklutna Project Act; Falcon and Amisted Dam Act; Federal Columbia River Transmission Act; Reclamation Project Act; Nuclear Waste Policy Act; National Environmental Policy Act; and the Public Utility Holding Company Act. |

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Program Distribution of Resources
(000's)

| | FY 1984 Actual | FY 1985 Appropriation | FY 1986 Request |
|---|---|---|---|
| NATURAL GAS REGULATION | $41,626 | $45,435 | $40,136 |
| Pipeline Certificate | 13,382 | 14,611 | 13,232 |
| Pipeline Rate | 15,788 | 17,411 | 16,684 |
| Producer Certificate | 2,117 | 2,529 | 2,080 |
| Producer Rate | 2,671 | 2,718 | 2,050 |
| Administration of Wellhead Pricing | 7,668 | 8,166 | 6,090 |
| HYDROPOWER REGULATION | 23,736 | 24,829 | 30,705 |
| Hydropower Licensing | 16,499 | 16,794 | 21,094 |
| Dam Safety Inspection | 7,237 | 8,035 | 9,611 |
| OIL PIPELINE REGULATION | 4,648 | 4,665 | 4,113 |
| ELECTRIC POWER REGULATION | 18,239 | 20,748 | 20,614 |
| TOTAL COMMISSION | $88,249 | $95,677 | $95,568 |

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Object Class Summary
($000's)

| | | FY 1984 Actual | FY 1985 Appropriation | FY 1986 Request | Difference |
|---|---|---|---|---|---|
| 11.0 | Personnel Compensation | $ 56,942 | $ 58,902 | $ 56,958 | $- 1,944 |
| 12.0 | Benefits | 6,238 | 6,459 | 6,245 | - 214 |
| | Subtotal | 63,180 | 65,361 | 63,203 | - 2,158 |
| 21.0 | Travel & Transportation of Persons | 1,814 | 2,166 | 1,956 | - 210 |
| 22.0 | Transportation of Things | 24 | 29 | 45 | + 16 |
| 23.0 | Rents, Communication & Utilities | 9,548 | 11,011 | 11,591 | + 580 |
| 24.0 | Printing & Reproduction | 2,412 | 2,689 | 2,799 | + 110 |
| 25.0 | Other Services | 9,528 | 12,840 | 14,698 | + 1,858 |
| | Contracts | 4,177 | 5,241 | 6,857 | + 1,616 |
| | Support Services | 1,110 | 2,849 | 3,178 | + 329 |
| | Energy Information Administration | 4,241 | 4,750 | 4,663 | - 87 |
| 26.0 | Supplies & Materials | 1,154 | 1,510 | 1,241 | - 269 |
| 31.0 | Capital Equipment | 588 | 68 | 32 | - 36 |
| 43.0 | Interest & Dividends | 1 | 3 | 3 | 0 |
| | TOTAL | $ 88,249 | $ 95,677 | $ 95,568 | $- 109 |

Federal Energy Regulatory Commission
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Summary of Full-Time Equivalents (FTEs)

| | FY 1984 Actual | FY 1985 Allocation | FY 1986 Request |
|---|---|---|---|
| NATURAL GAS REGULATION | 801 | 800 | 757 |
| Pipeline Certificate | 257 | 262 | 246 |
| Pipeline Rate | 293 | 302 | 305 |
| Producer Certificate | 45 | 49 | 44 |
| Producer Rate | 56 | 49 | 43 |
| Administration of Wellhead Pricing | 150 | 138 | 119 |
| HYDROPOWER REGULATION | 450 | 448 | 460 |
| Hydropower Licensing | 304 | 292 | 300 |
| Dam Safety Inspection | 146 | 156 | 160 |
| OIL PIPELINE REGULATION | 79 | 82 | 77 |
| ELECTRIC POWER REGULATION | 315 | 348 | 365 |
| TOTAL COMMISSION | 1,645 | 1,678 | 1,659 |

The **Chairman**. Thank you very much, Mr. O'Connor.

Senator Evans.

Senator **Evans**. Thank you, Mr. Chairman.

I might say at the outset that I have been very pleased with the opportunities I have had to work with the Chairman and with the Commission. I think some very fine work has proceeded.

We've got some sticky problems with hydrolicensing, especially with some of the recent court cases that have sort of surrounded you, I guess, and I think the proposals made with the cluster concept I hope will have the end result of not only adequately assessing the environmental impacts of river systems but eventually producing faster decisions so that people can move ahead, which they are finding very difficult to do now, being beset with court decisions or court cases on all sides.

So I think some good work is being done. My specific questions relate, however, to the administrative law judge. David Miller in November of last year issued an initial decision in which he found that the Bonneville Power Administration had grossly undercharged for energy sold outside the region, specifically to California, and the estimate of under-recovery is about $.5 billion for a 2-year period.

In fact, California utilities still assert that they should be charged only 3 mils for the power since it's nonfirm spill power. And given the above, since you have the primary responsibility for review of Bonneville's rates and in that review to ensure that revenues are sufficient to cover the Federal investment, given all of that, why is Bonneville the only Federal power marketing agency that does not use a share, or did not use at least a share of the savings rate when it sells surplus power outside the Northwest?

Mr. **O'Connor**. That initial decision is working its way up to the Commission for review, Senator. It's a November decision. I think staff is working on a proposed order which we have not seen at this particular time.

So, as to the specific question on the shared savings rate, I do not have an answer for you at this time. I would be glad to submit that for the record.

Senator **Evans**. All right. Well, that would be helpful. Let me go from the specific to perhaps an example to see if you have at this point any sort of general policy approach.

One example of the shared savings would be for BPA, for instance, to sell surplus power to California at, say, 75 percent of the avoided cost to the purchasing utility. If that were done, it would ensure benefits to both sides, shared benefits—cheaper power for the receiving utility, adequate revenue to the sending area.

Do you think this approach is an appropriate approach?

Mr. **O'Connor**. In the hypothetical type of an example, I would think that that was an approach that should have some serious consideration, yes.

Senator **Evans**. Especially—and I guess the alternative would be to charge from the sending utility only the margin cost of production, meaning that there would be virtually no benefit to the sending utility and an enormous benefit to the receiving utility, which doesn't seem to have much equity connected with it, especially if the Federal Government, and your agency as an element of the Federal Government, has the responsibility to try to retrieve revenues from that other Federal agency, Bonneville.

You said that the administrative law judge's decision is now pending before the Commissioners. Can you give me an estimate as to when Commissioners might rule on this decision, how long it might take?

Mr. O'CONNOR. If I might, Senator, our chief administrative law judge is in the audience. If it would be appropriate, I would ask Chief Judge Wagner to give the specifics——

[Pause.]

Mr. O'CONNOR. I'll have to supply that for the record, Senator. The general counsel informs me that it may be at the stage of briefing by the parties on the exception to the initial decision, but we could give you that.

Senator EVANS. It is my understanding that the briefs had already been done on exceptions; is that not the case?

Mr. O'CONNOR. I just don't know the specifics of the procedure there. But we can give you those specifics on that specific case in very short order.

Senator EVANS. Well, that would be very helpful. I just stress the urgency of a decision. We are being faced, as you know, with a multiplicity of problems—everything from pending law suits on the public power supply system with the potential of rate impacts that that carries with it, pressures from OMB to change the whole method of revenue generation in the Northwest, and a 1985-1987 rate case with new rates going in July 1 of this year—all of which, it seems to me, makes this decision very urgent because it impacts on each of those kinds of problems.

Mr. O'CONNOR. I will have our general counsel contact your staff immediately on that.

Senator EVANS. I appreciate it very much. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator.

Let me first ask a series of questions with respect to the cluster impact assessment procedure because I know that you are caught in the middle. I know you have tried to deal with this in a way which to me made a great deal of sense and the court has said it didn't. And the courts are infallible because they are final, unfortunately. In my judgment we have one of the worst court systems in the United States with which to deal on some of these issues in my area of the country.

Are you convinced that NEPA requires the Commission to use the cluster impact approach?

Mr. O'CONNOR. No, sir; not at this point in time.

The CHAIRMAN. Does section 10 of the Federal Power Act independently require the Commission to make cluster impact assessments?

Mr. O'CONNOR. We don't believe so, although we are literally on the cutting edge of some NEPA law here. And we do not believe that the comprehensive approach requires necessarily a cluster or basin-wide approach. But we have obviously, some preliminary legal analysis. And pursuant to the comments period, which you indicated correctly was closed last night, we still are expecting several more comments coming in today and early next week. But the final legal analysis will be undertaken in conjunction with assembling the information and the analysis of these comments.

The CHAIRMAN. There are some practical problems that come up as a result of this. I am sure they have all been called to your attention.

Mr. O'CONNOR. Maybe.

The CHAIRMAN. If the Commission decides to implement the cluster impact assessment procedure for the Owens, Snohomish and Salmon River basins, are there sufficient funds in your current budget to undertake the activity immediately?

Mr. O'CONNOR. If the Commission decides to go the cluster approach, as either outlined in the staff's recommendation or some modification of that, possibly as a result of the comments which we have received, we do have within our current appropriation sufficient funds for those three river basins which have been suggested for the current fiscal year.

The CHAIRMAN. It would not require any lengthening of the time to process?

Mr. O'CONNOR. Not from a funding point of view, no, sir.

The CHAIRMAN. As I understand the process, as outlined, it's 519 days from beginning to end. No, I shouldn't say from beginning to end, because there's a period of time in which applications are filed before the beginning of the 519 days. And then there are some unlimited, undefined periods of time following the 519 days in which you take final actions within the Commission.

The 519 days is just the procedural roadmap after you've got a cluster decided and before you get to the decisionmaking stage; is that correct?

Mr. O'CONNOR. Yes.

The CHAIRMAN. 519 days is a considerable period of time, and there will be a period in the beginning and a period at the end which will push that toward 2 years.

Mr. O'CONNOR. It could be.

The CHAIRMAN. If the Commission decides to use the cluster impact approach in assessing proposed hydro projects, I assume that the result would be that no projects in the cluster area will be built because the cumulative impact review would consume so much time that the projects could not be completed by the deadline for favorable tax treatment, which is January 1, 1988.

Is that a correct assumption?

Mr. O'CONNOR. Is it 1988 or 1989?

The CHAIRMAN. 1989, excuse me.

Mr. O'CONNOR. I believe it's 1989. Well, we are certainly mindful of the special 11-percent tax treatment over and above the regular tax credit. Obviously, the key window here is January 1, 1986, and January 1, 1989. January 1, 1986, is the key date for applications to have been filed and accepted at the Commission in order to qualify. And then the 3-year period would be the construction period.

So I think relative to the three suggested river basins, a considerable amount of the in-house work has been done and those could be, upon approval by the Commission to go with this approach, put into motion immediately and with the suggestion of the DOE labs doing the environmental work.

So the suggested river basins could be established, put into motion immediately upon approval, if any, by the Commission.

The CHAIRMAN. But if that's done, you start the process, and assuming that the projects have to stay in through all of the sort and they don't get dropped out at any early stage of the sorting process and all of the projects in the cluster must proceed through the entire 519 days, well over half of the construction period would have been used just in the preliminary processes that are required before the Commission can make a decision on any of the licenses; is that not correct?

Mr. O'CONNOR. I don't have that flow chart which we had. I don't have that with me. You have it, but I don't have that before me.

The director of our hydro licensing area is also in the audience. In getting into the specifics of the days of that flow chart—I'm not sure if my recollection is correct that the 519 days is from beginning to end or whether or not a portion of those 519 days is included in the in-house staff work of a geographic sort and a resource sort and then sending that out to the labs.

The CHAIRMAN. There are 78 days in the geographic sort, 84 days in the resource sort, 102 days in the multiple project assessment, and 255 days to produce the NEPA document. That aggregates the 519 days.

If the process starts on January 1 1986—the multiple application is filed, the deadline is January 1 1986—and you start the process on January 1 1986, 78 days later, you would know what the geographic sort is.

Eighty-four days after that, you would have the opportunity for a resource sort, and if some qualified they could drop out, but assuming they did not qualify and could not drop out during that period of time, then you have got 102 days to a multiple project assessment and then, following that, 255 days for the NEPA document.

Assuming that they didn't fall out in the geographical resource sort then they are in for the 519 days, and then, following that period of time, the Commission has to make a decision on the license.

Mr. O'CONNOR. If you start from the beginning to the end and you assume that you start on January 1, 1986, you are correct. You probably do not have time, at least probably in some projects, to have the project in operation—and I think the operative word is "operation" by January 1, 1989, for the tax benefits, as the IRS is interpreting that provision. If you start at January 1, 1986, I think that's really the key.

The three river basins that have been suggested are well into this procedure. If you look at the other 19 river basins which have been identified of the 22 in the western area, then I think if the Commission approves this way, a certain amount of the in-house work would be able to be done at the same time as the DOE labs would be doing the environmental NEPA work.

And if we did not have additional funds when you are looking at the 19 basins outside the 3 that are now being suggested, if we did not have additional funds and people, we would, in my judgment, not be able to move forward on those, certainly on all of the 19, within the timeframe for the tax benefits.

The Chairman. Mr. Chairman, I am sympathetic with the problem you face, but that 519 days also presumes that there is no litigation, no challenging the process any place in the way, and I suspect that, the more you try to telescope the processes the more likely litigation becomes, because there is public notice and hearings and processes required in what you laid out.

I guess the bottom line of what I am getting to is if that's a likely result, that the process itself consumes so much time that there is no possibility of completion to comply with the tax credit law, then those people who have already made investments based upon the opportunity expressed in the statute and in the marketplace would be totally defeated and all their investment would be lost.

Now that would seem to me to be maybe an unjust result and it might force both you and perhaps the Congress to take a look at that inevitable result of a process that has that kind of a result. That's the reason I press, because I am sympathetic to your problem. I'm just groping for an answer either that you can find or that we have to try to supply.

Mr. O'Connor. Of course, one of the more obvious but maybe not feasible answers is that the January 1, 1989 date could be extended.

The Chairman. That's true. But how about a fellow that's got a couple million dollars invested already and then he has to wait 3 years? What does that cost him—or four or five?

Mr. O'Connor. Well, given additional funding and people in order to speed up that process in some way so you would not have that extended period of time. This obviously all assumes that the legal conclusion is reached that this is the way we're going to go, obviously.

But in order to speed up that process so you don't have or that you keep inequities to a minimum, we would need probably for the 19-river basins somewhere, we are estimating ballpark numbers, somewhere in the area of maybe $8 to $10 million to do that speedup job in order to try to look at those other river basins.

The Chairman. For how many basins?

Mr. O'Connor. That number is for the 19 which are not included in the suggestions by staff.

The Chairman. Apart from the river basins identified in the noted cluster impact assessment procedure, what other river basins do you believe the cluster impact procedure might have to be applied to?

Mr. O'Connor. We don't have any other river basins that have been looked at relative to the applicability.

The Chairman. You have no idea at this time and can express no opinion, then?

Mr. O'Connor. That's correct.

The Chairman. Is any part of the Mississippi River basin under consideration for the application of cluster impact assessment procedures?

Mr. O'Connor. Not at this time.

The Chairman. Any river basins in the Eastern United States?

Mr. O'Connor. No, sir.

The Chairman. This is just the one where we've been chosen?

Mr. O'Connor. The Pacific Northwest, among the 22 basins, over the past 2 or 3 years has seen the great number of challenges and allegations of an adverse cumulative impact. The Pacific Northwest primarily has been the geographical area where these allegations have first surfaced and have gotten to be of some magnitude now.

The Chairman. In *Confederated Tribes and Bands of the Yakima Indian Nation, et al.* v. *FERC*, the Ninth Circuit Court of Appeals held that the Commission must do an environmental impact statement prior to relicensing of a hydro facility even if no changes will be made in the operations of the facility. In your opinion, will the hydro facilities up for relicensing be subject to a cluster impact assessment?

Mr. O'Connor. If in fact the geographical sort and other resource sort identified it, I would say that probably it would. I would venture a personal opinion and guess, actually, that operating projects that have been operating for many, many years would, I think, present the possibility of some mitigating conditions. But I think, of necessity, the cluster approach, if approved, there would be at the minimum a passive look at the operating projects up for relicensing.

Just as a point of information on that *Yakima* decision, we have just received approval from the Solicitor General to file a brief in support of certiorari to the Supreme Court, and that is in motion now.

The Chairman. It would seem to me if NEPA is construed by the courts or by you to require the cluster impact approach, it inexorably follows that the basin-wide approach is also required.

Mr. O'Connor. Well, on that particular score and looking at the technique, if you will, of clustering, the staff has preliminarily in their legal analysis basically said that, if in fact the cluster approach is used and projects and units fall outside the cluster and those units were processed on a case-by-case basis, then preliminarily the legal staff is saying that that would be in conformity with NEPA requirements.

The Chairman. If *Kleppe* v. *Sierra Club*, decided in 1976, is followed, where you have administrative discretion because of administrative impossibility, can't that test also be applied to the administrative impossibility in the cluster approach?

Mr. O'Connor. I would have to get some legal counsel on that.

The Chairman. I suspect what you'll find is you've got too darn many lawyers around, all of them giving you advice, and they all disagree.

Mr. O'Connor. My general counsel is behind me.

The Chairman. It just depends upon which one of them is most persuasive.

Mr. O'Connor. If you don't get the right answer, you go to another lawyer.

The Chairman. Well, I'm concerned about this, not from the standpoint of trying to ignore the environmental impact of different projects but because we may have ourselves in such a hiatus we can't function, and this is just one example of a larger problem the government confronts. We may have tied ourself up into so many procedural safeguards that we no longer can process any of these.

Mr. O'Connor. It is a serious problem, and we really have been trying to work hard on trying to sort through what would be a fair and equitable and legally sustainable process relative to the group of statutes which are directed towards development and the creation of incentives, as we have talked about, and the environmental and other statutes which are a balancing act with the developmental statutes.

And it's a difficult balance and with this issue of cumulative, potentially cumulative, adverse impact, we truly are on the cutting edge of NEPA interpretation. So I am somewhat hesitant to say what we really think will pass muster on judicial review or not. We are trying to probe, you know, where that compliance will be from both the environmental as well as the developmental statutes, and we are kind of in the middle here.

The Chairman. Well, my urging that they be treated on a case-by-case or license-by-license or project-by-project basis is not just my own opinion based upon personal preference. The court said in Kleppe versus Sierra Club: Thus, an agency could approve one pending project that is fully covered by an impact statement, then take into consideration the environmental effects of that existing project when preparing the comprehensive statement on the cumulative impact of the remaining proposals.

Now that's very close to exactly what I have suggested be followed in some of these areas rather than holding up every single action until the total evaluation can be made.

Mr. O'Connor. I must say that we also have preliminary legal analysis which uses the Kleppe approach to support the clustering type of procedure.

The Chairman. I know, and I don't try to outguess lawyers and even less try to outguess the courts, because we only pass laws. It's up to God to interpret them. God sits behind the bench far too often.

I would assume in the cluster impact procedure as you have outlined it that if in a group that had been clustered by whatever evaluating process they are clustered and one of the projects within that cluster appeared very straightforward, had no change of use and minimal, if any, impact upon the resource, that that could be dropped out probably at the end of the second stage.

You do your geographic sort, make sure you've got all of them in that are defined for the cluster, and then you do a resource sort and at that point you could drop out such a project, if one existed, that simply didn't have an impact.

Mr. O'Connor. I think I would agree with that. I think not only would the individual projects outside the cluster continue to be processed on a case-by-case approach, but as you got through that sort and looked at the resources and targeted resources, and if there was an individual project after environmental assessment which would in effect have taken place as distinguished from the environmental impact statement, that that kind of consideration for that kind of a project would be appropriate, I would think.

The Chairman. That's only 162 days and then you could at that point decide whether to issue a license. You could at least get that out of the cluster and process it individually.

Mr. O'CONNOR. That would sound logical to consider, if those are the facts of that particular case.

The CHAIRMAN. Let me give you an example, one which is pending; I only use it as an example, not to prejudice either this discussion or your decision. But as an example, a rancher on the Little Salmon River in Idaho, on a tributary to that river, has an irrigation project in which he diverts water into a pipeline and drops it down the hill and uses the pressure thus generated to drive the sprinklers.

And he suggests that instead of doing that he put a generator on the lower end of that pipe and generate electricity. Whatever environmental impact that change would have would be associated with, first, an increased volume of water at the upper end of the pipeline, and, second, an increased amount of water put back in the stream down below rather than out on his fields.

With negotiations with the Fish and Game Department they got some fish mitigation and enhancement associated with that project. It would seem to me that something like that might well look different than some others that make a substantial change in the application of water resource. But again I mention that not to prejudice either this discussion or that particular project.

But I also know that somebody might differ from that conclusion and say that it ought to be kept in.

Mr. O'CONNOR. Well, without getting into trouble about prejuding any project either, all I can say is that—and I hope it comes through in the budget and the statements which we have submitted to this committee—we are trying to run this agency in a businesslike manner, and I hope that that would be looked upon as a pragmatic regulatory philosophy, a practical regulatory philosophy. We are trying very hard to keep the practicalities of regulation in perspective in carrying out the mandates of the various statutes, which we must and will do.

The CHAIRMAN. On page 2 of your statement you have indicated that if Congress does not approve the 5-percent pay reduction you would need an additional $3.3 million.

Mr. O'CONNOR. Yes, sir.

The CHAIRMAN. Is that a request or just a statement?

Mr. O'CONNOR. That is a statement at this point, I guess.

The CHAIRMAN. You're not authorized to make a request. Would you be up here with a request for a supplemental?

Mr. O'CONNOR. I would suspect so. My executive director is shaking his head. That translates into, as a point of information, some 50 to 60 full-time staff.

The CHAIRMAN. I have a number of other questions to be submitted for the record, but rather than taking the time at this time, I will submit them for responses in writing.

Mr. O'CONNOR. We will be glad to respond.

The CHAIRMAN. Senator Bingaman?

Senator BINGAMAN. I have no questions.

The CHAIRMAN. Senator Rockefeller. Thank you, Jay.

Senator Warner?

Senator WARNER. No questions.

The CHAIRMAN. Mr. O'Connor, again I think you are caught in a dilemma. We want to work with you in trying to expedite the work that we have required that you do as the courts have interpreted that requirement.

Mr. O'CONNOR. If I could have one minute, we have talked about the comment period. It did close last night. From a very, very rough look at the comments, it looks like there were some 85 comments. There are several hundred pages of documents. We have been notified by some parties that there will be a few more coming in in the next day or so.

I was informally advised that there may be certain members of the committee who would like to submit some comments, and we would welcome that. Even though officially the comment period is closed I would hope that comments which arrive to us within the middle of next week or so would still give us time for the staff analysis.

And our present schedule calls for trying to come to some kind of a decision in the next 45 to 60 days.

The CHAIRMAN. Well, I thank you very much. I have expressed myself to you in writing a number of times with respect to the basin-wide impact question. I do not wish it to be understood by you or anyone else that I don't want the basin-wide impact to be studied or cluster impact to be studied and evaluated, but I do feel strongly that there ought to be a way in which that can be done without making it impossible to make individual decisions where there is no cumulative impact.

Now I recognize that if you make a whole host of individual decisions, that could have a cumulative impact, but a few decisions don't, and there has got to be some balancing. If indeed the law doesn't permit that or if you have other problems in the other regulatory agencies, I as one would welcome recommendations from you as to how we might legislate to make your job doable.

I think oftentimes we have a tendency to simply sit and accept the strictures of a law as interpreted by the courts without suggesting that hey, wait a minute, maybe there's a better way of dealing with that by changing the statute under which you work.

Mr. O'CONNOR. Well, we would be delighted to give you any ideas and suggestions and analysis of what might help out.

The CHAIRMAN. Thank you very much, Mr. Chairman.

Mr. O'CONNOR. Thank you. We appreciate very much your support and the support of the Energy Committee.

The CHAIRMAN. Yes, sir. Thank you.

Our final witnesses today will be Chairman Noble and Vice Chairman Corcoran, on behalf of the Synthetic Fuels Corporation.

During the last 3 years I have followed with considerable concern the slow pace of progress of the Synthetic Fuels Corporation in carrying out its statutory mandate. For 4 years in budget hearings before this committee the SFC has set forth a schedule for the award of financial assistance that has not been met.

I am therefore very much encouraged by the recent actions of the newly reconstituted Board of Directors in approving its statement of objectives and principles and a phase I business plan.

There now is a need, however, for the Board to act expeditiously on the eight so-called letter of intent projects, for which $5.7 billion was initially made available in the continuing resolution for fiscal year 1985. That legislation placed these projects in a special category that requires priority treatment by the Board.

When the agreement was reached last year on the rescission of $5.375 billion, another element of the agreement was that the SFC would be permitted by the administration to satisfy the statutory objectives of phase I and submit to the Congress the comprehensive strategy provided for by law, and that this would be permitted to occur without further interference from the Office of Management and Budget.

I am a little bit disturbed as a result by the letter of February 11 from OMB Director Stockman to you, Chairman Noble, which purports to establish budgetary ceilings on the SFC as if it were a Federal agency, which it is not. Current law does not provide for such OMB authority over the SFC, and I intend to pursue this matter further in my questions of you today.

[The letter follows:]

FEB 13 1985

#. 3577

cc: Dick Miller
Bob Fairman
Betty Nolan
Don Webster ✓

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

FEB 11 1985

Honorable Edward E. Noble
United States Synthetic
Fuels Corporation
Washington, D.C. 20586

Dear Mr. Chairman:

The President's 1986 Budget has now been transmitted to the Congress. This budget reflects the President's resolve to limit the size and scope of the Government and provides for a measured but steady decline in the size of the budget deficit. I want to thank you and your staff for your cooperation during the budget formulation process and for your help in preparing the budget documents.

The enclosure to this letter provides ceilings for your agency. The 1985 and 1986 budget ceilings and multi-year planning ceilings (for 1987-1990) for contract authority are included in the enclosure. (Additional details for the current and budget years are shown in the Budget Appendix and budget accounts listing of the Budget.) These are the amounts within which your activities should be planned for the period 1986-1990. No increases should be contemplated unless they are required because of circumstances beyond the agency's control.

The Coastal Barrier Resources Act (P.L. 97-348) prohibits the expenditure of most new Federal funds within the units of the Coastal Barrier Resources System. The System is defined by maps that have been distributed by the Secretary of the Interior. All Federal agencies administering programs that affect activities within the System will ensure that no new Federal expenditures or financial assistance prohibited by the Act are made available to areas within the System. No funds for such purposes are included in the 1986 allowance.

The President's proposal to reduce discretionary spending below current levels will result in constraints beyond those of previous years. The President needs your support for his policies and is depending on you to manage your resources prudently and to ensure that Federal responsibilities are carried out in an effective and efficient manner.

Sincerely,

David A. Stockman

Enclosure

Enclosure

United States Synthetic Fuels Corporation
Budget and Multi-Year Planning Estimates
($ in Millions)

| | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|
| On budget | | | | | | |
| Contract authority..... | 159 | 321 | 499 | 637 | 572 | 850 |
| Amounts included above that are off-budget under current law | | | | | | |
| Contract authority..... | (159) | (321) | (499) | (637) | (572) | (850) |

Details concerning the derivation of current and budget year totals are shown in the Budget Appendix and the budget accounts listing of the budget. Details concerning multi-year totals can be provided by staff of this Office.

RECEIVED
FEB 12 A.M.
DEPARTMENT

Standard Form 132
(Revised July 1976)
Office of Management and Budget
Circular No. A-34

Sheet 1 of 1
Fiscal year 1985

# APPORTIONMENT AND REAPPORTIONMENT SCHEDULE

Agency: Department of the Treasury

Bureau: Financial Management Service

Appropriation or Fund Title and Symbol: 20X0112 - Energy Security Reserve

| Description | Amount on Latest S.F. 132 | Agency Request | Action by OMB |
|---|---|---|---|
| **BUDGETARY RESOURCES** | | | |
| 1. Budget authority: | | | |
| A. Appropriations realized 1/ (-) | | -7,375,000,000 | -5,375,000,00 |
| B. Appropriations anticipated (indefinite) | | | |
| C. Other new authority ( ) | | | |
| D. Net transfers (+ or −) | | | |
| 2. Unobligated balance: | | | |
| A. Brought forward October 1 | 14,863,824,822 | 14,874,179,530 | 14,490,107,0 |
| B. Net transfers (+ or −) | | | |
| 3. Reimbursements and other income: | | 164,889 | 164,8 |
| A. Earned | | | |
| B. Change in unfilled customers' orders (+ or −) | | | |
| C. Anticipated for rest of year | | | |
| 4. Recoveries of prior year obligations: | | | |
| A. Actual | | | |
| B. Anticipated for rest of year | | | |
| 5. Portion not available pursuant to P.L. (−) | | | |
| 6. Restorations (+) and writeoffs (−) | | | |
| 7. Total Budgetary Resources | 14,863,824,822 | 7,499,344,419 | 9,115,271,9 |
| **APPLICATION OF BUDGETARY RESOURCES** | | | |
| 8. Apportioned: (Memorandum Obligations incurred) | | | |
| Category A: | | | |
| (1) First quarter $3,436,681 | | | |
| (2) Second quarter | | | |
| (3) Third quarter | | | |
| (4) Fourth quarter | | | |
| Category B: | 4,528,002,822 | 1,799,344,419 | 159,447,0 |
| (1) | | | |
| (2) | | | |
| (3) | | | |
| (4) | | | |
| 9. Withheld pending rescission | | | |
| 10. Deferred | 10,335,822,000 | 5,700,000,000 | 8,955,824,9 |
| 11. Unapportioned balance of revolving fund | | | |
| 12. Total Budgetary Resources | 14,863,824,822 | 7,499,344,419 | 9,115,271,9 |

Submitted W. E. Douglas (Authorized officer) 1/18/85 (Date)

Apportioned JAN 29 198 (Date)

1/25/85

Deputy [illegible]
Justice, Treasury and Personnel

1/ Public Law 98-369 rescinded $2,000,000,000 and Public Law 98-473 rescinded $5,375,000,0

The Energy Security Act established the Synthetic Fuels Corporation (SFC) to provide financial assistance for the production of synthetic fuel. Payments are made by the Secretary of the Treasury to the SFC as funds are required to meet the SFC's disbursement needs.

This reapportionment reflects the two rescissions totalling $7,375,000,000. As provided in the draft of the President's Budget for Fiscal Year 1986, an amount of $5,700,000,000 is held in reserve.

The Chairman. Senator Rockefeller, do you have any statement at this point?

[No response.]

The Chairman. Mr. Chairman and Mr. Corcoran, I am very, very happy to have both of you here today. I look forward to your statement and your responses to questions. You may proceed either by summarizing your statement, which will be included in the record in full at this point, or in whatever other manner you wish.

## STATEMENT OF HON. EDWARD E. NOBLE, CHAIRMAN, U.S. SYNTHETIC FUELS CORPORATION; ACCOMPANIED BY THOMAS J. CORCORAN, VICE CHAIRMAN

Mr. Noble. Mr. Chairman, I do have a complete statement that, if I could, I will summarize very briefly here.

The Chairman. Thank you.

Mr. Noble. Mr. Chairman and members of the committee, I appreciate the opportunity to appear before you today to discuss the objectives, program and progress of the U.S. Synthetic Fuels Corporation. You do have copies of my prepared testimony, and at this time I would simply like to highlight a few key points.

I am pleased to report that the Corporation has had a quorum of the Board of Directors since December 13, 1984. We have held four Board meetings, including one with our advisory committee, numerous Board committee meetings, and we have adopted a statement of objectives and principles and a phase I business plan. We are also proceeding with consideration of the eight letters of intent and various other projects pending under the active solicitations.

Describing the Corporation's program and objectives, in testimony to this committee last year I said that the Corporation sought to assist an initial group of plants which would present a mix of technologies, provide experience with all major resources, and produce products which could readily be substituted for imported oil.

I further testified that we ought to do this in a limited, responsible manner consistent with the current realities and competing national priorities. I point out these key passages from last year's testimony because they confirm the overall continuity in the Corporation's program, despite the various difficulties and changes experienced during the past year.

Specifically, the statement of objectives and principles adopted by the Board on January 15 recognizes a valid national interest in developing a domestic synthetic fuels capability. This will allow private sector development to proceed efficiently and will enable the country to expand production rapidly in the event of a sustained energy supply dislocation.

Last year, Mr. Chairman, I testified that the Board was seeking a mix of technologies and resources. In the phase I business plan the Board endorsed this approach and set priorities for the phase I program. It should be especially gratifying to this committee, which has remained so staunch and loyal in its commitment to the national need for synthetic fuels, to note that of the five priority options for coal, two are presently experiencing significant commercial development. In addition, we have one of the three options for oil shale in commercial development.

There is also a public perception, at least in some quarters, that nothing has happened for 4 years in synthetic fuels. Mr. Chairman, this is false in that we now have two synthetic fuel plants in production. Two are in startup, and one is starting construction.

We are negotiating with a number of other projects which will satisfy options in the business plan, and we are examining how to formulate one or more new solicitations.

In the area of the letters of intent, we have eight projects. The Corporation has initiated an independent assessment of the projects' key technical, resource and sponsorship credentials, an updated analysis of each project's present status and a review of the outstanding issues. The Board is being provided information on the projects' strengths and weaknesses, financial terms and conditions of the letters of intent, and the complexity of the outstanding issues.

Following completion of the Great Plains and the Seep Ridge reviews, negotiating activities have resumed with full intensity. A similar acceleration of negotiations is expected with the other letter of intent projects as the Board signals its willingness to proceed.

Since the letters of intent were put in place both external conditions and project-specific factors in some cases have changed significantly and warrant consideration of the projects' reconfiguration. Corporation staff is beginning to work closely with certain project sponsors who are contemplating such changes to determine their economic and/or programmatic adavantage and whether and to what extent such changes are permissible within the competitive frame work of the solicitation process.

Among its first actions, the reconstituted Board of Directors established the Comprehensive Strategy Committee of the Board to formulate the comprehensive strategy required by the Energy Security Act. All five members of the Board chose to sit on this committee, which directs staff through a matrix management team composed of the vice presidents for projects, finance, technology and engineering, and the general counsel. I might add that my associate here and vice chairman, Mr. Corcoran, has chaired that committee and he has done a very excellent job.

The Comprehensive Strategy Committee developed a statement of objectives and principles and the phase I business plan. At the March 19 Board meeting the committee will propose a schedule for development and submission of the comprehensive strategy to Congress.

While the committee is just beginning to formulate its plans, it does anticipate that work will proceed expeditiously and intends to commit whatever time and resources are necessary to produce a comprehensive strategy as soon as feasible.

INTENTIONAL
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In concluding, I would like to thank this committee for its support and guidance over the past year and to assure the members that the Corporation's program is once again fully operational. Our efforts are directed toward a responsible program which will provide sufficient knowledge and experience to assure the country of long-term energy security.

Mr. Chairman, I thank you and would be happy to take your questions.

[The prepared statement of Mr. Noble and budget tables Nos. 1, 2, and 3 submitted by Senator McClure follow:]

**United States Synthetic Fuels Corporation**
2121 K Street, N.W. Washington, District of Columbia 20586 Telephone (202) 822-6500

Testimony of Edward E. Noble, Chairman
U. S. Synthetic Fuels Corporation
Before the Committee on Energy & Natural Resources
March 1, 1985
Washington, D.C.

Mr. Chairman, Members of the Committee: I appreciate the opportunity to appear before you today to discuss the objectives, program, and progress of the U. S. Synthetic Fuels Corporation.

I am pleased to report first that the Corporation has had a quorum of directors since December 13, 1984 and since then we have held four Board meetings, including one with our Advisory Committee, and numerous Board Committee meetings. The Board has adopted a Statement of Objectives and Principles and a Phase I Business Plan* in line with the action of Congress in the Continuing Appropriations Act for Fiscal Year 1985. We are proceeding with consideration of the eight projects for which letters of intent have been authorized, and we are evaluating the various projects pending under the active solicitations.

I would like to discuss the Board's efforts in all of these areas in some detail with you today, but first I would like to emphasize a very serious concern shared among all the directors: That concern is our critical need to fill the remaining two seats on our Board. Our present five members bring strong and complimentary abilities to the Corporation. All are men of recognized professional achievement and personal conviction. We have been able to blend these strengths into a highly productive working relationship and have made excellent progress in just three short months. At the same time, however, we have all felt the constraint of being "too few" on a Board which requires four affirmative votes to initiate or carry forth any substantive action. We are unanimous in our view that, as well as the Board is working now, it will work even more efficiently and our deliberations will be richer and more effective with the increased perspective and added flexibility of two additional Board members.

## THE PROGRAM

In describing the Corporation's program and objectives in testimony to this Committee last year I said that the Corporation sought to assist an initial group of plants which would represent a mix of technologies, provide experience with all major resources, and produce products which could be readily substituted for imported oil. I further testified that we sought to do this not in a massive way which might distort the marketplace, but rather in a limited, responsible manner consistent with current realities and competing national priorities. This description of the Corporation's broad programmatic objectives remains equally valid today.

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*Both of these documents are appended to this testimony.

Moreover, another point I made in that testimony is important to recall today. In February 1984 I testified before this Committee that, specifically with respect to achieving the production goals of the Energy Security Act, the directors had examined a number of possibilities. But given the changed energy and economic conditions, along with the enormous complexity and high cost of constructing pioneer synthetic fuel plants, we had concluded that achievement of the national production goals was probably neither possible nor advisable. In the fall of 1984 the Congress affirmed this conclusion of our Board, and at least with respect to the Corporation's Phase I program eliminated the production goals.

I point out these key passages from last year's testimony because they confirm the overall continuity in the Corporation's program despite the various difficulties and changes experienced during the past year. The primary goal has always been and continues to be the award of limited financial support to a number of diverse plants to provide knowledge and experience with the nationally significant synthetic fuel resource/technology options. From this experience will develop the technical and environmental data base and the infrastructure from which the private sector can develop the industry in line with market forces. This will be the country's "insurance policy" against any sustained oil supply dislocation, and it will prepare us to make a smooth and efficient transition to alternative fuels as they become economically justified.

These primary goals and objectives of the Corporation have remained consistent, despite changes on the Board, to the law, and in the country's national priorities. Specifically, the Statement of Objectives and Principles adopted by the Board of Directors on January 15, 1985 recognizes a valid national interest in developing a domestic synthetic fuel capability. It states that the Corporation's basic objective is to establish a national synthetic fuel capability; this will allow private sector development to proceed efficiently as economically justified and it will enable the country to expand production rapidly in the event of a sustained energy supply dislocation. The Corporation will achieve his objective by providing limited financial support to a diverse mix of commercial scale projects which through their operations will provide knowledge and experience in the resource, process technology, and environmental control areas. On the basis of this pioneer experience, the private sector will be able to make business judgments about further industry expansion, and the country will be able to draw some reasonable conclusions about the extent and timing of emergency efforts to expand synfuel production.

The decision principles set forth in the Statement assert that market forces will be the ultimate determinant of industry expansion. The Corporation's role is to help establish the necessary information base for efficient expansion by providing its contingent assistance in support of strong projects proposing to use those resource/technology combinations of greatest potential national importance. The Corporation will assist only commercial scale projects which add significantly to the knowledge base and which are individually judged to be strong in their technological development, management capability, and equity commitment.

Last year I testified that the Board was seeking a mix of technologies and resources. In the Phase I Business Plan adopted on February 19, 1985 the Board endorsed this approach and set priorities among the various resource/technology options. Priority for inclusion in the Phase I program was given to five coal options, three oil shale options, and two options covering the tar sand/heavy oil resource. It should be especially gratifying to this Committee, which has remained so staunch in its commitment to the national need for synthetic fuels, to note that of the five priority options for coal, two are presently experiencing significant commercial development. One of three options for oil shale is also in commercial development.

There is a public perception, at least in some quarters, that nothing has happened for four years in synthetic fuels. This is false. A great deal of progress has been made, particularly considering that market forces during these years were not conducive to alternative energy development. Two commercial entrained flow coal gasification (slurry feed) facilities are operating in this country today. The Cool Water project has federal support, while the Tennessee-Eastman plant is solely a private sector undertaking. A third version of the gasifier, applicable to different types of coals, will be used in the Dow Syngas plant which is now under construction and scheduled to begin operations in 1987. The Great Plains facility will provide this country commercial experience with fixed bed coal gasification (dry bottom). The project has completed construction and is presently undergoing a relatively smooth start-up.

Within the oil shale options, Union's Parachute Creek Phase I will develop data on oil shale mining and surface retorting. While the project is experiencing a difficult start-up, the various problems are being addressed, and management is confident the project will come on line in due course.

Within the remaining coal, oil shale, and tar sand/heavy oil options given priority in the business plan, the Corporation has some projects currently under consideration in the active solicitations. In addition, the directors have begun to examine how they might best formulate one or more new solicitations to satisfy programmatic gaps and stimulate industry response to the Corporation's needs. Consideration of new solicitation approaches was initiated on February 19, and draft solicitations will be developed as the Board works through pending projects.

## THE LETTER OF INTENT PROJECTS

The Corporation currently has authorized letters of intent with eight projects: the Great Plains, Northern Peat, Parachute Creek, Phase II, Cathedral Bluffs, Seep Ridge, Forest Hill, HOP Kern, and Kentucky Tar Sand projects.* These letters of intent were authorized between July 1983 and April 1984. Since their authorization, both external conditions and internal aspects of various projects have undergone degrees of change which must be taken into consideration by the current Board of Directors as they determine how to proceed with the projects. In addition, a report of the Government Operations Committee of the House of Representatives requested that the Corporation perform an independent review of the adequacy of these projects' evaluations leading to their letters of intent.

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*Summaries of the letter of intent projects are appended to this testimony.

Accordingly, to prepare the new Board and to respond to the Committee report the Corporation has initiated for each letter of intent project an independent assessment of the project's key technical, resource, and sponsorship credentials, as well as an updated analysis of each project's present status and the outstanding issues for negotiation. The first of these comprehensive project reviews, on the Great Plains and the Seep Ridge projects, were provided to the Board in January and February. In March the Board is scheduled to take up the HOP Kern, Forest Hill, Northern Peat, and Kentucky Tar Sand projects, and in April the Board will complete its reviews with the Parachute Creek, Phase II and Cathedral Bluffs projects.

These comprehensive reviews are designed to acquaint the Board fully with each project. Analysis is provided of its strengths and weaknesses, the financial terms and conditions of the letter of intent, and the complexity of the outstanding issues. Since the reviews on the Great Plains and Seep Ridge projects were completed, negotiation activities have resumed with full intensity. A similar pick up in negotiations is expected with other letter of intent projects as the Board signals its willingness to proceed.

Since the letters of intent were put in place, both external conditions and project specific factors in some cases have changed sufficiently to warrant reconsideration of project configuration. Corporation staff is beginning to work closely with certain project sponsors who are contemplating such changes to determine their economic and/or programmatic advantage and whether and to what extent such changes are permissible within the competitive framework of the solicitation process.

It must also be recognized that whether and how quickly the letter of intent projects reach closure depends primarily on the project sponsors. The time and resources which they are willing to commit determine the pace and success of the negotiating process. The Corporation is prepared to move as quickly as project sponsors in reaching mutually satisfactory contract agreements.

## THE FUNDING

Funds for Corporation activities have been appropriated to the Energy Security Reserve fund in the Treasury Department. The Interior Department Appropriation Act (P.L. 96-126) and the Supplemental Appropriations Act of 1980 (P.L. 96-304) appropriated $17,522,000,000 to the Energy Security Reserve for synthetic fuel programs. These and subsequent appropriations provided the following:

- $6,000 million which was immediately available to the Corporation (on July 8, 1980);

- $5,310 million ($300 million of which was later rescinded) was available for transfer from the Department of Energy (DOE) insofar as not committed or conditionally committed by DOE; unobligated balances in the amount of $3,849 million (including $1,155 million previously committed for the Oil Shale Corporation Project) were subsequently transferred;
- $6,212 million which was made available after June 30, 1982.
- $2,000 million was rescinded in the Deficit Reduction Act of 1984 (P.L. 98-369) (including $1,155 million committed for the Oil Shale Corporation project); so that
- The total of $14,061 million was available to the Corporation in Fiscal Year 1984. After application of administrative expenses from Fiscal Year 1981 through Fiscal Year 1984 and the execution of two project contracts and one cost sharing agreement the balance was subsequently reduced to $13,271 million in Fiscal Year 1984.
- In October, 1984, $5,375 million was rescinded by the 1985 Continuing Resolution (P.L. 98-473) leaving a net total of $7,896 available for obligation in Fiscal Year 1985.

Through Fiscal Year 1984, $51.7 million has been expended for administrative operations of the Corporation, including generic studies and specific reviews of projects. These expenses are expected to amount to $22.4 million in Fiscal Year 1985, and $23.0 million in Fiscal Year 1986.

Fees accrued and collected under Section 139(a) through Fiscal Year 1984 amounted to $2.2 million. In Fiscal Year 1985, an estimated $9.5 million will be accrued, and $4.5 million is estimated for Fiscal Year 1986. These fees may be used to offset administrative expenses.

Financial assistance awards through Fiscal Year 1984 totalled $741 million and are estimated to total $4,060 million in Fiscal Year 1985 and $3,615 million in Fiscal Year 1986.

When it was declared operational by Executive Order No. 12346 in February 1982, the Corporation had five of seven Board members in place and a staff of 112. By the end of Fiscal Year 1983 the Board was at full strength and Corporate staff had grown to 199. In Fiscal Year 1984 the Board of Directors was reduced through resignations to two members and staff, including temporary employees, totalled 171 at the end of Fiscal Year 1984. Staffing levels for Fiscal Years 1985 and 1986 are estimated at approximately 200.

The Corporation has endeavored to minimize staffing levels and administrative expenses relative to the volume of work required. The public corporation framework established by the Congress makes this possible by eliminating many burdensome federal administrative requirements.

## THE COMPREHENSIVE STRATEGY

Among its first actions, the reconstituted Board of Directors established the Comprehensive Strategy Committee of the Board to formulate the comprehensive strategy required by the Energy Security Act. All five members of the Board chose to sit on this Committee. The Committee directs staff through a Matrix Management Team composed of the Vice Presidents for Projects, Finance, Technology and Engineering, and the General Counsel.

The Comprehensive Strategy Committee has been responsible for developing the Statement of Objectives and Principles and the Phase I Business Plan which have been discussed earlier in this testimony. These basic documents were essential to affirming the direction of the Corporation's Phase I program. They set forth the types of projects the Corporation is seeking, provide decision principles on which the Board will base its judgments, and indicate the nature of the economic support the Board will extend to successful projects.

At the February 19 meeting the Board requested the Comprehensive Strategy Committee next to consider and propose at the March 19 meeting a schedule for development and submission of the comprehensive strategy to Congress. The Committee is in agreement that the Corporation's experience with the solicitation, negotiation, and monitoring of projects will provide the basis for the recommended Phase II strategy. The Comprehensive Strategy Committee is just now beginning to formulate its plans, but anticipates that work should proceed expeditiously and intends to commit whatever time and resources are necessary to produce a comprehensive strategy as soon as feasible.

* * * *

In concluding, I would like to thank this Committee for its support and guidance over the past year, and to assure the members that the Corporation's program is once again fully operational. Our Board of Directors is particularly knowledgeable, and its commitment is reflected in the impressive progress we have been able to make since December. While we all recognize that conditions are not especially encouraging for private investment in synthetic fuels, we continue to believe that the national interest will be best served by having available the proven option of alternative fuels. Our efforts are directed toward a responsible program which will provide sufficient knowledge and experience to allow the private sector to proceed efficiently with expansion of a synthetic fuels industry as economically justified.

# U.S. SYNTHETIC FUELS CORPORATION

## BOARD OF DIRECTORS

## STATEMENT OF OBJECTIVES AND PRINCIPLES

The Board of Directors of the U.S. Synthetic Fuels Corporation is reevaluating the SFC program in light of recent Congressional actions and changes in the outlook for synthetic fuels. To help interested parties understand the Board's reasoning as it undertakes this reevaluation, the Board outlines here its views on the energy/economic environment for synfuels, the SFC's operational objectives, and some principles that will govern Board decisions.

### THE ENERGY/ECONOMIC ENVIRONMENT

The value of synfuels depends on the supply, demand and price of energy, particularly oil and natural gas. The outlook for these fuels has improved dramatically in recent years, largely as a result of the deregulation of energy markets. At the present time:

- Market forces are keeping oil and gas prices well below the cost of synfuels, and are expected to continue doing so for a decade or more. However, sometime around the end of this century, normal supply and demand forces could increase world oil prices enough to make synfuels economically attractive; the faster and more efficiently synfuels production can be expanded at that time, the greater the economic payoff to the nation.

- Unpredictable changes in energy supply and demand could cause world oil prices to increase sharply at any time. Synfuels cannot help much with short-term disruptions (i.e., of a year or so), which are better handled with the existing strategic reserve program; however, if a price increase is expected to last for several years, production of some types of synfuels might be expanded quickly enough to be of value.

- Near-term world oil prices are affected by expectations about future supply, demand and price. There is no economic reason to keep valuable oil in the ground unless it is expected to be worth much more later; therefore, development of credible national synthetic fuels options for the future can help limit current energy prices, whether or not they add significantly to near-term production.

- At any likely energy prices, synfuels production will not be able to expand rapidly and efficiently until some pioneer projects have been built and operated. Such plants are necessary to determine which resources, technologies and locations are best, what is environmentally and socially acceptable, how to do what should be done, and what it will cost. Private firms would eventually undertake some projects on their own, for their own proprietary purposes; but it would be many years before enough firms knew enough about synfuels to allow national production to expand quickly and efficiently.

These considerations persuade the Board of the following:

- Synfuels projects are not likely to be attractive as stand-alone investments in the near future; the economics and the technology data base are both inadequate.

- A large synfuels industry is not likely to be needed before the end of the century; however, the energy outlook could change at any time, making it desirable to increase rapidly production from some synfuels options.

- There is a national interest in a national synthetic fuels capability that the market alone may not fully accomplish; such a national capability would be valuable if and when energy prices increase enough, and could even help delay and limit energy price increases.

- The energy outlook, the lead-times involved in synfuels, and the critical role of pioneer plants suggest that some public investment in synfuels is economically justified now; however, the timing, number and type of specific projects that should be assisted with public funds depend on the magnitude, likelihood and timing of benefits the nation will obtain from alternative programs, and will be different for each of the synfuels options.

## THE SFC'S OPERATIONAL OBJECTIVES

In light of the energy/economic outlook and the changes Congress has made, the SFC's basic objectives in its near-term program are to:

- Establish a national synfuels capability that will allow private industry to expand production efficiently and in an environmentally acceptable manner when economics or national interests dictate.

- Improve the national capability to increase production rapidly from selected synfuels options in the event of a sudden increase in world oil prices that is expected to persist for several years.

In more operational terms, in pursuit of these basic objectives the SFC program will be designed to:

- Improve the national base of knowledge and experience about both the technological and environmental aspects of selected synfuels options, in order to reduce the technical and environmental uncertainties that might limit the rate and extent of synfuels production nationally.

- Assure that commercial-scale processes and projects are designed, built and operated successfully; however, while experience with commercial-scale facilities is essential, individual SFC-supported projects and the SFC program overall should be no larger or more costly than necessary to accomplish the SFC's basic objectives.

- Explore a diverse mix of resources, technologies and geographic regions, because it is unknown at present which options will ultimately prove to be worth commercial development; however, not every idea or option is worth the investment of taxpayers' money and the SFC will make judgments about how much of what kind of diversity should be pursued.

- Assure that projects continue operating long enough to learn and teach their lessons and that capable people and organizations are developed and maintained; a real synfuels option for the nation will exist only when, and as long as, commercial projects and experienced people are active in the industry.

## SFC DECISION PRINCIPLES

In defining a strategy and business plan to accomplish the objectives outlined above, the Board will apply the following principles.

- Market forces should and will determine which synfuels options are expanded, and how fast, once the base of knowledge and experience has been laid; however, the best synfuels options for the SFC to assist are not necessarily those that are most-nearly profitable in the short term or that are most favored by sponsors seeking SFC support.

- The SFC will make its decisions and commit its funds when it is most effective and economically efficient to do so, in light of the likely timing of future energy, technological and business developments; the cumulative development of technical and organizational capability in a timely way requires continuity and a long-term perspective.

- The SFC will commit no more of the taxpayers' money than necessary to develop synfuels options the nation needs. This requires that the SFC limit its financial support to those options:

  -- that, in competition with others, are potentially of national significance as substitutes for natural oil or gas in a reasonable time frame; and

  -- in which the SFC can significantly reduce the inefficiencies and lead-times involved in any future commercial expansion.

No project will be assisted just "because it is there," because the SFC has "enough" money to do it, or because it is different; each project must satisfy both the program principles outlined above and the following project guidelines.

- Each project assisted must make a cost-effective contribution to the SFC program, by:
  - -- adding significant new knowledge and experience about a nationally important synfuels option, with no more duplication than necessary to provide efficient amounts of insurance and competition.
  - -- assuring that the knowledge and experience generated will be generally available to help subsequent projects by other sponsors.
  - -- being no larger or more costly than necessary.
  - -- having the best possible financial terms for the SFC, including equitable sharing of profits from favorable events.
- Each project assisted must be sound as an industrial undertaking, and hence must satisfy stringent criteria, including criteria regarding:
  - -- Technology Data Base: Scale-up of equipment (especially for handling solids) is inherently risky. For first-of-a-kind commercial-scale facilities, extensive technological data is essential to support the design and reduce the risk of plant misoperation or adverse environmental impact.
  - -- Competence of Sponsor: Synfuels projects involve design, construction and operation of large, complex plants; demonstrated experience and commitment from the sponsors' top management are required to assure success.
  - -- Financial Strength: Sponsors must have sufficient financial commitment to a project to provide a strong incentive to perform, and must have sufficient financial resources to deal with unforeseen costs.

## CONCLUSIONS

It is the view of the Board that application of the objectives and principles outlined above will result in a diversified, technically sound and environmentally acceptable synfuels program that will give the nation the synfuels capability it needs, with the funds that are currently available.

# U.S. SYNTHETIC FUELS CORPORATION

## PHASE I BUSINESS PLAN

February 19, 1985

## INTRODUCTION

This Business Plan sets forth the views of the Board of Directors of the U.S. Synthetic Fuels Corporation on the synthetic fuel resources and technologies that are candidates for Corporation support in Phase I -- that is, with the Corporation's current obligation authority. In developing this Plan, the Board has been guided by the Statement of Objectives and Principles adopted on January 15, 1985. Future Board decisions on solicitations and projects will determine the allocation of financial assistance among resources and technologies and, ultimately, to specific projects.

In setting its program priorities, the Board began with the primary objective of assuring that the nation will have knowledge about and experience with at least one method of processing each of the most important synthetic fuels resources. Once this is assured, a different technology for processing the same generic resource may be considered if it has the potential for significant economic advantages or is applicable to different and important subcategories of the resource.

The attached table displays, and the text of this document discusses, the combinations of resources and technologies that are candidates for Corporation support in the Phase I program. It is the Board's conclusion that, for some of these combinations, information and experience are adequate for the private sector to develop commercial projects when and as market factors dictate, and hence no further Corporation support is required in Phase I. For other combinations, it is the Board's view that Corporation assistance to the right kind of project could significantly and economically enhance the nation's synthetic fuels capability; for these, the Corporation will specify how and when it intends to solicit and select projects, including any further definition of desired project characteristics. For yet other, lower-priority combinations, the Board sees no need to solicit projects but is willing to consider specific projects that may offer special advantages to the program.

Notwithstanding the Board's expressed desire to develop projects utilizing specific resource-technology combinations, the Corporation will support only projects that meet its standards of technical and financial strength. Furthermore, any project assisted within a resource-technology combination desired by the Board must demonstrate that it can provide the programmatic benefits expected. Competing demands on funds or absence of suitable projects may preclude Corporation assistance for one or more of the combinations that the Board would like to include in its Phase I program.

In some instances, it may be desirable to support more than one project involving the same resource-technology combination -- for example, where important subcategories of a generic resource present different technical or environmental problems. Furthermore, for the most important resource-technology combinations, more than one project may be undertaken to enhance competition, to insure against unforeseen problems, to gain experience with improved processes or to provide continuity in the program.

Regional diversity in projects will result naturally from pursuit of the important synthetic fuels resources, which are widely distributed across the nation. The Board is confident that its program will provide valuable experience with synthetic fuels production in a wide variety of physical, environmental and social settings.

In developing its program, the Board has recognized the need to assure the environmental acceptability of the production and use of synthetic fuels. The limited number of diverse projects expected in Phase I will provide commercial-scale experience with a variety of environmental situations and control measures. The Board will continue to consider environmental factors carefully, to assure that individual projects are environmentally acceptable and that the necessary information about environmental impacts and control technologies is developed.

## COAL RESOURCES AND TECHNOLOGIES

For analysis of synthetic fuels options, the important coal resources are the bituminous coals of the Midcontinent region, the bituminous coals of the Appalachian region (many of which are more caking and less reactive than Midcontinent coals), and the subbituminous coals and lignites with large concentrations in the western and southern regions. Huge quantities of each of these three coals are readily available and widely distributed. The principal technical approaches to using these coal resources for synthetic fuels are discussed below.

Introductory Comment on Coal Technology: Conversion of coal to gaseous and liquid fuels has been developed along two principal technical routes (plus some other routes, such as coal-liquid slurry fuels). In the "indirect" route, the initial step is gasification of the coal, followed by clean-up and upgrading of the raw gas. The "direct" route adds hydrogen (usually obtained by gasification of coal or process residues) directly to the coal under high pressure. There is no agreement regarding the ultimate superiority of either route; but there is agreement that the indirect route is currently more developed and ready for commercial application. Therefore, the indirect route will receive the major attention in the Corporation's Phase I coal program.

In the indirect conversion of coal to synthetic fuels, the critical step is gasification. Once the coal has been gasified and the raw gas cleaned, a wide range of final products, including gasoline, methanol, turbine and boiler fuels, chemical feedstocks and synthetic natural gas, can be synthesized in a variety of commercial or near-commercial processes. These "down-stream" synthesis processes are essentially independent of the gasifier used, except that they generally operate under pressure, providing a significant economic premium for pressurized gasification. The emphasis in the Corporation's Phase I program will be on assuring that satisfactory technology is in hand to gasify under pressure the major U.S. coal resources, leaving it to the market to determine which final products should be produced in any specific project. However, the Board recognizes the national importance of transportation fuels, and hence will give some preference within the coal program to projects that include production of such fuels.

Fixed Bed Gasification (Dry Bottom): This technology is applicable to subbituminous coal and lignite , which generally are highly reactive and do not swell and cake during processing; it cannot process all of the coal fines that are a large fraction of all mined coal. There is substantial experience with the Lurgi version in South Africa; the Great Plains project has built such Lurgi gasifiers and is beginning to operate them at capacity. The Board concludes that this technology is developed to the point where the private sector can develop it as economically justified, and hence there is no need to include in the Phase I program any projects beyond those already under consideration.

Fixed Bed Gasification (Slagging): This technology evolved from dry bottom fixed bed gasification. It is applicable to less-reactive bituminous coals and can be designed for use with either caking or non-caking coals. A 300 ton per day pilot plant has operated and a larger demonstration plant will soon operate in Great Britain. Compared to other gasification technologies (i.e., entrained flow gasification such as Texaco), this approach may be applicable to fewer types of coal but may ultimately be more economical because it uses substantially less oxygen, a major cost item. It is the Board's view that a project using this technology would enhance national capability to use plentiful U.S. coals and should be included in the Phase I program.

Entrained Flow Gasification (Slurry Feed): This technology is represented generically by the Texaco gasifier. In different versions, it can process most bituminous coals and has been extensively tested with lignite. Corporation-assisted projects are employing versions of this technology using bituminous coal (Cool Water) and subbituminous coal (Dow Syngas). Another project (Tennessee-Eastman) is operating commercially without Corporation assistance using bituminous coal. The Board concludes that this technology is developed to the point where the private sector can develop it as economically justified, and hence there is no need to include further projects using it in the Phase I program.

Entrained Flow Gasification (Dry Feed): Because this technology does not inject liquid water into the gasifier, it saves on costly oxygen with any coal and can process coals with a high inherent water content (i.e., lignite). Mature versions of the technology have operated only at low pressure; pressurized pilot plants have operated successfully and others are being planned. Compared to other, more mature ways of processing coal under pressure (i.e., fixed bed gasification, such as Lurgi), pressurized versions of this technology may be particularly economic for processing coal containing a large proportion of fines. It is the Board's view that a project using this technology would enhance national capability to use plentiful U.S. coals and should be included in the Phase I program.

Fluid Bed Gasification: This technology can process all types of coal, has lower oxygen requirements than entrained flow reactors and may have potential for using very high capacity equipment. Mature versions have operated only at atmospheric pressure; experience with the technology under pressure is limited to small pilot plants, although a larger demonstration plant is scheduled to begin operation soon in Germany. It is the Board's view that a project using this technology (and giving special attention to the scale-up risks involved) would enhance national capability to use plentiful U.S. coals and should be included in the Phase I program.

Direct Hydrogenation: The liquefaction of coal by direct hydrogenation has been extensively piloted in the U.S. and abroad. Compared to other synthetic fuels processes, it is a mechanically difficult process, involving all the costs and problems of coal gasification (because the hydrogen is usually obtained by gasification) plus many others related to the high pressure required in the key step. Although direct hydrogenation may eventually prove to have higher efficiency and greater scale economies than indirect conversion processes, in present conceptions it cannot compete economically with indirect processes. It would be desirable to gain experience with this technology, which has a long record of use with coal and in oil refining. The Board continues to be interested in direct hydrogenation, but does not consider it likely that viable projects using it will be developed in time to be included in the Phase I program.

Coal-Water Slurries: Finely-ground coal mixed with water and small amounts of additives can be injected into boilers and other furnaces as a substitute for oil. The market for this use of coal is primarily in existing, large, oil-burning industrial and utility boilers that can be suitably modified. However, potential users, especially utilities, are reluctant to undertake the costs and risks of converting to coal-water slurries until the technology has been demonstrated in utility-scale boilers. The Corporation has received several proposals in response to a solicitation for coal-water slurry projects, and there is interest among some potential suppliers of coal-water fuels in projects that might proceed with little or no Corporation support, particularly in industrial applications. However, recent information concerning the plans and needs of both potential suppliers and potential users of coal-water fuels suggests that there are still significant and unique market obstacles to the commercial application of coal-water fuel technology in utilities. The Corporation may be able to play a useful role in overcoming these obstacles; but, if it is to do so without interfering with the efforts of the private sector, it must develop appropriate, innovative ways to use its authorities. Therefore, the Board is still considering how best to proceed with coal-water fuels in Phase I.

Other Coal Resources and Technologies: In addition to the coals and technologies discussed above, there are other coal resources, particularly anthracite and peat, that can be used to produce synthetic fuels and there are other approaches to coal conversion in various stages of development and with varying potential. On the basis of current knowledge and experience, the Board sees no need actively to seek other resources or technologies for coal conversion, but is open to ideas that have the potential for significant improvements in the nation's ability to produce synthetic fuels in an economic and environmentally acceptable way.

## OIL SHALE RESOURCES AND TECHNOLOGIES

The U.S. has large quantities of accessible oil shale in western regions and smaller (but still significant) quantities of leaner oil shale accessible via surface mining in the east. The principal technical approaches to mining and processing each of these resources are discussed below.

Oil Shale Mining: Although eastern oil shale can be surface mined, little needs to be learned about this process. Most of the western U.S. shale resource is not accessible via surface mining and hence must be either mined by underground methods or processed in situ. Underground mining of shale is different from coal mining, primarily because of the thickness of shale beds and the huge quantities of rock that must be moved; but it is similar to the mining of other minerals such as copper ore. The Parachute Creek Phase I project is mining shale underground on a commercial scale. It is the Board's view that, once commercial scale shale mining has been demonstrated by the Parachute Creek Phase I project, underground mining technology will not be a significant constraint on shale oil production.

Surface Retorting of Western Shale: Any type of oil shale can be mined and then processed in a surface retort. A simple technology (Petrosix) for processing coarse shale has operated successfully in Brazil on shale similar to eastern U.S. shale and could be applied commercially to western or eastern U.S. shales. A commercial-scale project (Parachute Creek Phase I) using a different technology (Union B) on coarse western shale has been undertaken and is now going through a difficult start-up period. Neither of these technologies can process all the fine shale produced in the mining process and neither recovers the carbon that remains on the shale after retorting; technologies that can handle fine shale and/or recover the carbon are less proven but should have significant economic advantages. It is the Board's view that at least one more western shale project (in addition to the Parachute Creek Phase I project) including surface retorting should be assisted in Phase I, provided that it uses retorting technology that is different from and offers advantages over the Union B technology.

Surface Retorting of Eastern Shale: Eastern U.S. shale can be processed in the same type of retorts applicable to western shale but yields much less oil when treated this way. However, it can be surface mined and is located in regions that are close to skilled labor, transportation, marketing, water, etc., making it possible for shale projects to be less costly in the east. On balance, it is the Board's view that an eastern shale project is not a high priority for the Phase I program, but might be of interest if it promised to overcome some of eastern shale's apparent disadvantages relative to other synthetic fuels resources or if it offered significant experience with retorting technology applicable to western shale.

True In Situ Retorting of Western Shale: There could be significant economic and environmental advantages to processing oil shale in situ. The technology for deep true in situ processing is still in its infancy and enough minable shale exists to support many decades of large-scale production by surface retorting. However, there are relatively small quantities of shallow shale that may be accessible with small-scale in situ processes; it is the Board's view that shallow in situ processing of oil shale is worth considering in the Phase I program if a strong, relatively inexpensive project can be developed.

Modified In Situ Retorting of Western Shale: The modified in situ (MIS) approach to producing shale oil consists of mining some shale for surface retorting and retorting the rest in situ. The technology of underground retorting has been demonstrated but its potential is still uncertain. A MIS project would provide experience with mining, surface retorting and underground retorting. It is the Board's view that a MIS project should be included in the Phase I program, provided that it utilizes a surface retorting technology that is different from and offers advantages over the Union B technology.

## HEAVY OIL/TAR SANDS RESOURCES AND TECHNOLOGIES

The heavy oil and tar sands resource category includes a wide range of hydrocarbons, some of which can be recovered by in situ processes and some of which require mining and surface processing. The recoverable amount of the resource, while small compared to coal and shale, is comparable to reserves of conventional oil and gas. The resource is of potential interest in Phase I primarily because, once production techniques have been proven, output could be expanded relatively quickly in response to a sudden price increase and could make a significant contribution to national oil supplies for many years.

In Situ Recovery: Heavy oil (and limited amounts of tar sands oil) is being produced economically by processes that inject steam into the oil formation to thin the oil so that it can flow to the well and be pumped. Accordingly, the Energy Security Act allows the Corporation to treat such production as a synthetic fuels process only under certain conditions. The scale of in situ projects and the lead times involved are not necessarily large relative to the private sector's capabilities. It is the Board's view that, by concentrating on deposits representative of large amounts of the resource and determining how best to produce from these, the Corporation might improve the nation's ability to expand heavy oil/tar sands production in the event of a sudden oil price increase; however, in light of the highly variable nature of the resource and the active interest of the private sector, the Corporation will proceed carefully, to assure that its involvement in any particular case is needed and does add significantly to national capability.

Mining and Surface Processing. Near-surface formations of rock permeated with hydrocarbons can be mined and treated with solvents and/or heat to yield a heavy, tar-like substance that can be used as-is (e.g., as asphalt) or can be upgraded into lighter products. In Canada, tar sands are mined and processed on a large commercial scale. U.S. tar sands are not nearly as extensive or as easily treated as the Canadian sands, but analogous processes could be undertaken here. It is the Board's view that surface mining and processing of tar sands may be worth pursuing if sound projects at reasonable cost can be developed.

## U.S. SYNTHETIC FUELS CORPORATION

## PHASE I BUSINESS PLAN

## PROGRAM PRIORITIES

| RESOURCE | PRIMARY PRIORITY (1) | SECONDARY PRIORITY (2) |
|---|---|---|
| COAL | | |
| | Fixed Bed Gasification<br>**Dry Bottom<br>Slagging | Direct Hydrogenation |
| | Entrained Flow Gasification<br>**Slurry Feed<br>Dry Feed | Other Resources and Technologies |
| | Fluid Bed Gasification | |
| SHALE | | |
| | Surface Retorting of Western Shale<br>**Union B Retort<br>**Other Retorts | True In Situ Retorting of Western Shale |
| | Modified In Situ Retorting of Western Shale | Surface Retorting of Eastern Shale |
| HEAVY OIL/ TAR SANDS | | |
| | In Situ Recovery | |
| | Mining and Surface Processing | |

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** Projects underway or being considered by SFC; no projects beyond these are expected to be assisted in Phase I.

(1) The Corporation will specify how and when it intends to solicit and select projects in this category; however, competing demands on funds or absence of suitable projects may preclude Corporation assistance for one or more of these primary priorities.

(2) The Corporation does not anticipate soliciting projects in this category, but is willing to consider specific projects that may offer special advantages to the program.

# FACT SHEET
# GREAT PLAINS COAL GASIFICATION PROJECT

GREAT PLAINS COAL GASIFICATION PROJECT - Near Beulah, North Dakota

The Great Plains project is owned by Great Plains Gasification Associates, a North Dakota partnership consisting of Tenneco SNG Inc., ANR Gasification Properties Company, Transco Coal Gas Company, MCN Coal Gasification Company and Pacific Synthetic Fuels Company. The project is designed to produce at capacity approximately 134,000 MMBtu (23,100 BOED) per stream day of high Btu synthetic gas from 14,000 tons per day of North Dakota lignite. The project will use various Lurgi processes for gasification, purification and methanation and U.S.S. Engineers and Consultants, Inc. and Parsons technology for ammonia and hydrogen sulfide removal, respectively. SNG will be a direct substitute for natural gas and will be delivered through the project's pipeline connection to an interstate network of gas pipelines. Construction of the project commenced in the summer of 1981. The first gas from the plant was sold in July, 1984. Full commercial operation is expected to be achieved by mid-1985.

## TERMS AND CONDITIONS OF THE LETTER OF INTENT

### Maximum Corporation Obligation

$790 million in price guarantees.

### Price Guarantee Amount and Term

Ten years from the in-service date or until the maximum of $790 million has been reached.

### Guarantee Price

For the first three years, the guarantee price will be $10.00 per million Btu of eligible product. For the duration of the price guarantee, the guarantee price will be $7.50 per million Btu of eligible product, adjusted monthly for inflation by the Producer Price Index (PPI) for Finished Goods Excluding Food (not seasonally adjusted).

### Taxpayer Recovery

As long as DOE guaranteed debt is outstanding, 90% of Cumulative After-Tax Cash Flow (CATCF) shall be applied to prepay DOE guaranteed debt. Thereafter, profit sharing payments of 70% of CATCF goes to the Corporation.

### Additional Equity

As a condition of the Corporation's financial assistance to the project, all tax benefits and profits will be reinvested by the sponsors for three and a half years after execution of a contract by the Corporation.

### Letter of Intent Signed

April 26, 1984.

2/25/85

# FACT SHEET
# NORTHERN PEAT ENERGY PROJECT

NORTHERN PEAT ENERGY PROJECT -- Near Milford, Maine

The Northern Peat Company, a wholly-owned subsidiary of Signal Energy Systems, Inc., has proposed a project to utilize the Peat Wet Carbonization Process to produce 290,000 tons per year of a clean, low-sulfur, low-ash, peat-derived fuel (PDF). The PDF will be sold for use in industrial, utility and commercial boilers to displace residual and distillate fuel oil. The project will produce the energy equivalent of 2,745 barrels of oil per calendar day. Construction was scheduled to begin in July, 1985 with commercial production in July, 1988. The schedule will be revised.

## TERMS AND CONDITIONS OF THE LETTER OF INTENT

### Maximum Corporation Obligation

$365 million in loan and price guarantees.

### Amount of Loan Guarantee

$160 million (including an allowance for accrued interest of $13.8 million).

### Amount of Price Guarantee

Initial price guarantee of $205 million. This amount will increase as the loan is repaid up to a maximum of $365 million.

### Guarantee Price

$10.50 per million Btu of product as adjusted monthly for inflation after February, 1984 by the Producer Price Index (PPI) for Finished Goods Excluding Food (not seasonally adjusted).

### Duration of Price Guarantee

Ten years from initial production.

### Taxpayer Recovery

For a period of 16 years after the Cutoff Date* (the "Profit Sharing Period"), the project shall make quarterly payments ("Required Payments") either as a prepayment of guaranteed debt ("Mandatory Prepayment") or, after such debt is paid, as profit sharing ("Profit Sharing Payments") in an amount as follows:

- If the Cumulative After-Tax Cash Flow (CATCF) is less than $35 million, the project shall have no obligation to make the required payments;

- If the CATCF is greater than $35 million, the project shall make required payments in an amount equal to 80% of the incremental increase, if any, in CATCF since the last such payment.

- Until the Guaranteed Debt is paid in full, all Required Payments shall be Mandatory Prepayments; thereafter, Required Payments shall be made as Profit Sharing Payments paid directly to the Corporation.

Letter of Intent Signed

April 26, 1984

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* Cutoff Date - the earlier of commencement of commercial production or July 1, 1990.

## FACT SHEET
## PARACHUTE CREEK - PHASE II PROJECT

UNION OIL PARACHUTE CREEK SHALE PROGRAM - PHASE II -- Garfield County, CO

Union Oil Company of California has proposed an 80,000 barrels per day expansion (Phase II ) of its existing Phase I project which is to produce 10,400 barrels per day of syncrude. The Phase I project, which was awarded price and purchase incentives by DOE in July, 1981, is being monitored by the Corporation. Phase II will be constructed in four 20,000 barrels per day increments which are scheduled to come on line between 1990 and 1994. Total production from the first two increments will be 42,000 barrels per stream day of hydrotreated shale oil. Each increment of Phase II is expected to use two Union Oil "C" retorts. Phase II will include the expansion of the Phase I upgrading plant and the opening of a new mine.

### TERMS AND CONDITIONS OF THE LETTER OF INTENT FOR INCREMENTS I AND II

Maximum Corporation Obligation

$2.7 billion in price guarantees.

Guarantee Price

Price guarantee of up to $2.7 billion - Increment I - $1.95 billion.
Increment II - $ .75 billion.

The guarantee price initially will be $60 per barrel escalated using the Producer Price Index (PPI) for Finished Consumer Goods (excluding foods) from the third quarter, 1983. The aggregate price guarantee commitment and the support price increase by up to $400 million and $7.00 per barrel, respectively, pursuant to an incentive adjustment formula reflecting, *inter alia*, construction utilizing Unishale "C" technology and success in achieving Unishale "C" purchased energy savings.

Duration of Price Guarantee

Ten years from initial production.

Taxpayer Recovery

For a period of 16 years after initial production from Increment I, actual market revenues in excess of specified per barrel levels shared as follows:

| | Market Price/Barrel (1983 $) | SFC | Union |
|---|---|---|---|
| Before Price Guarantee Pay out | $ 67.01 and over | 70% | 30% |
| After Price Guarantee Pay out | $ 31.00 - $ 32.55 | 0% | 100% |
| | $ 32.56 - $ 45.00 | 50% | 50% |
| | $ 45.01 and over | 70% | 30% |

Taxpayer recovery capped by greater of:

a. 50% of obligational authority or,

b. aggregate Corporation price guarantee payments actually made and inflated through the date of recovery.

Letter of Intent Signed

December 1, 1983.

2/25/85

## FACT SHEET
## CATHEDRAL BLUFFS PROJECT

CATHEDRAL BLUFFS PROJECT -- Rio Blanco, Colorado

Cathedral Bluffs Shale Oil Company, a partnership between Occidental Oil Shale, Inc., Tenneco Shale Oil Company and a proposed partner, Kiewit Shale Oil Company, is proposing a project to produce 14,100 barrels per stream day of shale oil. The project will use the modified in situ technology developed by Occidental Oil Shale, Inc. and one Union Oil Company Unishale "B" retort. Construction has begun on a 5,000 acre tract in northwest Colorado. Initial production is expected to begin in late 1989.

### TERMS AND CONDITIONS OF THE LETTER OF INTENT

Maximum Corporation Obligation

$2.19 billion in loan and price guarantees.

Amount of Loan Guarantee

$1.812 billion ($1.662 principal amount plus $150 million for interest accrual).

Amount of Price Guarantee

Initial price guarantee of $378 million. This amount will increase as the loan is repaid up to a maximum of $2.19 billion at a guaranteed price of $60 per barrel adjusted monthly after March 19, 1983 using the Producer Price Index (PPI) for Finished Goods Excluding Food (not seasonally adjusted).

Duration of Price Guarantee

Ten years.

Taxpayer Recovery

The profit sharing payments each quarter are calculated as a percentage of incremental after-tax cash flow above specified threshold limits. These payments are made for sixteen years after the plant reaches commercial production.

Letter of Intent Signed

July 28, 1983

2/25/85

# FACT SHEET
# SEEP RIDGE PROJECT

SEEP RIDGE PROJECT - Uintah County, Utah

Geokinetics, Inc. and Gilbert Constructors, Inc., a subsidiary of Peter Kiewit Sons', Inc., are sponsoring the Seep Ridge project. The project will produce 1,000 barrels per stream day of raw shale oil utilizing Geokinetics "LOFRECO" in situ extraction technique. Construction is under way.

## TERMS AND CONDITIONS OF THE LETTER OF INTENT

### Maximum Corporation Obligation

$45 million in loan and price guarantees.

### Amount of Loan Guarantee

$21.3 million in loan guarantees, convertible into additional price guarantees.

### Amount of Price Guarantee

Initial price guarantee of $20.606 million to increase as the loan is repaid, up to a maximum of $45 million.

### Guarantee Price

$42.50 per barrel for crude shale oil after September, 1983 adjusted monthly using the Producer Price Index (PPI) for Finished Goods Excluding Food (not seasonally adjusted).

### Duration of Price Guarantee

Ten years from initial production.

### Taxpayer Recovery

Cumulative After-Tax Cash Flow (CATCF) Sharing, over 15 years from the start of production is as follows:

| | SFC | Sponsor |
|---|---|---|
| If CATCF is 10 million or less | 0% | 100% |
| If CATCF is greater than $10 million but less than $20 million | 75% | 25% |
| If CATCF is greater than $20 million but less than $30 million | 50% | 50% |

Until the Guaranteed Debt is paid in full, all required payments shall be mandatory prepayments; thereafter, required payments shall be made as profit sharing payments paid directly to the Corporation.

During the ten year price guarantee period, any profit sharing payment shall be paid into an escrow account to be used to make price guarantee payments; thereafter, such payments (and any amounts remaining in the escrow account at the end of the price guarantee period) shall be made directly to the Corporation.

### Letter of Intent Signed

June 22, 1984

2/25/85

## FACT SHEET
## FOREST HILL HEAVY OIL PROJECT

FOREST HILL HEAVY OIL PROJECT -- Wood County, Texas

Greenwich Oil Company is proposing a project which entails modification of existing and installation of new injection and production wells to produce an average of 1,750 barrels per stream day of 10° API crude oil by a fire-flooding technique utilizing injection of oxygen under high pressure. Construction is expected to begin in the second quarter of 1985.

### TERMS AND CONDITIONS OF THE PROPOSED LETTER OF INTENT

Maximum Corporation Obligation

$60 million in loan and price guarantees.

Amount of Loan Guarantee

$22.57 million in loan guarantees (including $1.87 million allowance for accrued interest) convertible into additional price guarantees.

Amount of Price Guarantee

Initial price guarantee of $37.43 million to increase as the loan is paid, up to a maximum of $60 million.

Guarantee Price

$40.00 per barrel for the first 500,000 barrels of eligible product and $37.50 per barrel thereafter, in each case adjusted quarterly after March, 1984 using the Producer Price Index (PPI) for Finished Goods Excluding Food (not seasonally adjusted) less 4%.

Duration of Price Guarantee

The earlier of ten years or the maximum aggregate payment of price guarantees.

Taxpayer Recovery

For a period of 16 years after the Cutoff Date,* the project shall make payments ("Required Payments") either as a pro rata prepayment of guaranteed debt and of the bank loan ("Mandatory Prepayment") or, after such debt is paid, as profit sharing ("Profit Sharing Payments") in an amount as follows:

- If cumulative dividends after December 31, 1983 are less than $25 million, the project shall have no obligation to make Required Payments;

- If cumulative dividends are greater than $25 million but less than $37.5 million, the project shall make Required Payments in an amount equal to 25% of any dividend payment; and
- If cumulative dividends are greater than $37.5 million, the project shall make Required Payments in an amount equal to 50% of any dividend payment.

Until the Guaranteed Debt is paid in full, all Required Payments shall be Mandatory Prepayments; thereafter, Required Payments shall be made as Profit Sharing Payments paid directly to the Corporation.

Letter of Intent Authorized

April 5, 1984 - not signed.

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* Cutoff Date - the earlier of December 31, 1986 or the last date on which the project has achieved average gross production during a 60 day period of 1,400 barrels of production per day.

2/25/85

# FACT SHEET
# KENTUCKY TAR SAND PROJECT

KENTUCKY TAR SAND PROJECT -- Logan County, Kentucky

Texas Gas Development Corporation has proposed a project to produce 5,000 barrels per day of 11° API crude oil. The project will consist of contracted surface mining of tar sands deposits in Logan County, Kentucky, and Dravo solvent extraction processing.

## TERMS AND CONDITIONS OF THE PROPOSED LETTER OF INTENT

### Maximum Corporation Obligation

$543 million in price guarantees.

### Guarantee Price

$55.00 per barrel for the first 3.3 million barrels and $40 per barrel thereafter, in each case adjusted quarterly after March, 1984 using the Producer Price Index (PPI) for Finished Goods Excluding Food (not seasonally adjusted).

### Duration of Price Guarantee

The earlier of ten years from the date of initial production or maximum aggregate payment of price guarantees by the Corporation.

### Taxpayer Recovery

For a period of 25 years after initial production, the project shall make quarterly payments in an amount as follows:

- If the Cumulative After-Tax Cash Flow (CATCF) is less than $150 million, the project shall have no obligation to make the payments;
- If the CATCF is greater than $150 million but less than $205 million, the project shall make payments in an amount equal to 25% of the incremental increase of CATCF since the last such payment.
- If the CATCF is greater than $205 million, the project shall make payments in an amount equal to 70% of the incremental increase of CATCF since the last such payment.

Aggregate Profit Sharing Payments shall not exceed the greater of:

a. $271.5 million or

b. the aggregate amount of price guarantee payments received by the sponsor.

### Letter of Intent Authorized

April 5, 1984 - not signed

2/25/85

# FACT SHEET
# HOP KERN RIVER COMMERCIAL DEVELOPMENT PROJECT

HOP KERN RIVER COMMERCIAL DEVELOPMENT PROJECT -- Kern County, California

The HOP Kern River Commercial Development project, sponsored by Ladd Petroleum Corporation, is expected to produce an average of 3,891 barrels per stream day of 14° API crude oil from eligible heavy oil resources using a proprietary steam drive process. The project involves the construction of six production units over a five-year period from 1985 - 1989. Initial production is scheduled to begin in November, 1987.

## TERMS AND CONDITIONS OF THE LETTER OF INTENT

### Maximum Corporation Obligation

$100 million in loan and price guarantees.

### Amount of Loan Guarantee

$71.2 million (including an interest allowance of $6.0 million).

### Amount of Price Guarantee

Initial price guarantee of $28.8 million to increase as the loan is repaid, up to a maximum of $100 million.

### Guarantee Price

$28.50 per barrel adjusted monthly after March 1984 using the Producer Price Index (PPI) for Finished Goods Excluding Food (not seasonally adjusted).

### Duration of Price Guarantee

The earlier of ten years from initial production or the sale of 7.5 million barrels.

### Taxpayer Recovery

After the Cumulative After-Tax Cash Flow (CATCF) of the sponsor reaches $25 million, the Corporation shall be entitled to 25% of any distributions to the sponsor. After CATCF reaches $40 million, the Corporation profit sharing increases to an amount equal to 70% of any distributions to the sponsor.

Until the Guaranteed Debt is paid in full, all Required Payments shall be Mandatory Prepayments; thereafter, Required Payments shall be made as Profit Sharing Payments paid directly to the Corporation.

### Letter of Intent Signed

June 22, 1984

2/25/85

SFC
TABLE NO. 1
STATUS OF AUTHORITY

(Dollars in millions)

| Description | FY 1982 Actual | FY 1983 Actual | FY 1984 Actual | FY 1985 Estimate | FY 1986 Estimate |
|---|---|---|---|---|---|
| Source: | | | | | |
| Unused authority, start of year | $5,993 | $14,887 | $14,751 | $13,271 | $3,824 |
| Additional authority | 8,906 | -- | 1,155 | -- | -- |
| (Appropriation) | (6,212) | -- | -- | -- | -- |
| (Transfer) | (2,694) 1/ | -- | (1,155) 2/ | -- | -- |
| Rescissions | -- | -- | -2,000 | -5,375 | -- |
| Total authority | 14,899 | 14,887 | 13,906 | 7,896 | 3,824 |
| Application: | | | | | |
| Project assistance | -- | 121 | 620 | 4,060 | 3,615 |
| Expenses | 12 | 15 | 16 | 22 | 22 |
| (Administrative) | (12) | (14) | (15) | (20) | (20) |
| (Inspector General) 3/ | - 4/ | (1) | (1) | (2) | (2) |
| Generic studies and specific reviews | - 4/ | 1 | 1 | 1 | 1 |
| Total expenses | 12 | 16 | 17 | 22 | 23 |
| Fees applied (Sec. 139(a)) | -- | -1 | - 2 | -10 | -5 |
| Net expenses | 12 | 15 | 15 | 12 | 18 |
| Total expenses/project assistance | 12 | 136 | 635 | 4,072 | 3,633 |
| Unused authority, end of year | 14,887 | 14,751 | 13,271 | 3,824 | 191 |

Note: Detail may not add to totals because of rounding.

1/ Transferred from the Department of Energy. Includes $400 million for the Union Oil Parachute Creek Shale Oil Program - Phase I. Excludes $1,155 million made available upon nullification and voidance of loan guarantee commitment for The Oil Shale Corporation Project.

2/ Funds formerly committed to The Oil Shale Corporation Project which became available upon nullification and voidance of loan guarantee commitment.

3/ Administrative expenses of the Inspector General are part of the amount specified for the Corporation's administrative expenses, under Section 120 (a) (1) (B) of the Act, and are subject to a limit of $2 million, adjusted in the same manner as the limitation on the Corporation's administrative expenses.

4/ Less than $500,000.

## SFC
## Table No. 2
## FY 1986
## Administrative Expense Budget by Organization

(Dollars in thousands)

| Group | FY 1984 Actual | FY 1985 Estimate | FY 1986 Estimate |
|---|---|---|---|
| **Administrative Expenses:** | | | |
| Executive Direction | $ 811 | $ 1,267 | $ 1,326 |
| Board of Directors | 86 | 131 | 153 |
| Contract Management | 301 | 832 | 1,417 |
| Legal Services | 2,123 | 3,053 | 3,104 |
| Projects | 2,710 | 4,369 | 4,140 |
| Technology & Engineering | 1,583 | 2,032 | 1,986 |
| Policy Development | 1,728 | 534 | - |
| Finance | 2,102 | 2,597 | 2,738 |
| External Relations | 994 | 1,028 | 1,098 |
| Administration | 2,680 | 3,961 | 4,303 |
| Miscellaneous | 271 | 154 | - |
| Total Corporate Expenses | 15,388 | 19,956 | 20,264 |
| Inspector General | 728 | 1,695 | 1,984 |
| Total Administrative Expenses | 16,116 | 21,652 | 22,249 |
| Generic Studies | 476 | 462 | 378 |
| Specific Reviews | 288 | 334 | 349 |
| Total | 16,880 | 22,447 | 22,976 |

Note: Detail may not add to totals because of rounding.

January 31, 1985

SFC
Table No. 3
FY 1986
Administrative Expense Budget
By Object

(Dollars in thousands)

| Object | FY 1984 Actual | FY 1985 Estimate | FY 1986 Estimate |
|---|---|---|---|
| Personnel Compensation | $10,342 | $12,081 | $12,438 |
| Travel | 528 | 956 | 1,079 |
| Moving Expenses | 56 | 175 | 162 |
| Communications/Rents/ Utilities | 2,683 | 3,265 | 3,752 |
| Printing/Reproduction | 161 | 268 | 247 |
| Other Services | 1,977 | 4,507 | 4,172 |
| Supplies | 94 | 145 | 140 |
| Furniture & Equipment | 275 | 255 | 259 |
| Total Administrative Expenses | 16,116 | 21,652 | 22,249 |
| Generic Studies & Specific Reviews | 764 | 795 | 727 |
| Total | 16,880 | 22,447 | 22,976 |

Note: Detail may not add to totals because of rounding.

January 31, 1985

The CHAIRMAN. Thank you very much, Mr. Chairman.

I made reference in my opening remarks to a letter from OMB to you purporting to establish ceilings for the SFC in the out years. What response have you made to that letter?

Mr. NOBLE. I have written a letter to Mr. Stockman, Mr. Chairman, which I would be happy to furnish for the record. As you know, the budget outlays are shown when they are spent from this Corporation.

The area that really worries me is what this would do to us in the area of allocations and controls that would limit the flexibility in dealing with our sponsors in the private sector.

The CHAIRMAN. Well, you are constrained by the statute which created the Corporation and any changes in statute which have occurred since that time, and, notably, action taken last fall in the rescission package.

The U.S. Synthetic Fuels Corporation was created as an off-budget activity of the Federal Government. It also requires you, in your deliberations, move forward with programs on a schedule established by you. And I see nothing in the statute that gives OMB the authority to establish contract authority ceilings for any particular year. Do you agree with that assessment?

Mr. NOBLE. Yes, sir, I sure do.

The CHAIRMAN. Have you indicated to Mr. Stockman that that is your opinion?

Mr. NOBLE. I don't know whether we said those specific words in the letter I wrote him, but we did point out the drawbacks that this would put against the program as we deal with these sponsors very strongly.

[The letter follows:]

**United States Synthetic Fuels Corporation**
2121 K Street, N.W. Washington, District of Columbia 20586 Telephone: (202) 822-6600

March 1, 1985

The Honorable David A. Stockman
Director
Office of Management and Budget
Old Executive Office Building
Washington, D.C. 20503

Dear Mr. Stockman:

Both as a taxpayer and as Chairman of this Corporation, I believe there is significant benefit to including all expected outlays of the federal government in the budget, and I welcome your efforts to do so, as reflected in your letter of February 11, 1985. Corporation outlays have always been "on-budget" within the Treasury Department, and this would complement that status.

In creating the Synthetic Fuels Corporation under the Energy Security Act, Congress specifically stated that the Corporation should not be treated as an agency of the United States except as specifically provided in the Act. Further, Section 153 of the Act specifically provides for the budgetary treatment of the Corporation and any change in such treatment will, of course, require legislative action. These provisions were included in recognition of the flexibility required to enable the Corporation to carry out its purpose. This was, and remains, one of the crucial underlying principles that has created private sector confidence that the federal government, through the Corporation, is serious about developing a national synthetic fuels capability.

The controls and allocation procedures normally applied to an on-budget agency , if applied to the Corporation, would seriously limit our ability to establish the proper business relationships with the corporate sponsors of synthetic fuels projects. These are vital to our achieving the goals of the program, and such limitations would specifically violate the original and proper intent of Congress in establishing the Corporation as it did.

I welcome the opportunity of discussing this matter with you in greater detail so that we can work together to achieve the benefits of an integrated budget while preserving the appropriate Corporation capabilities.

Sincerely,

Edward E. Noble
Chairman of the Board

bcc: Richard Grundy

The Chairman. Well, Mr. Corcoran, do you have any other view than that, that indeed you are not subject to the constraints of OMB with respect to contract authority?

Mr. Corcoran. Mr. Chairman, I think you expressed it well. One additional point I would add to what our Chairman has said is that whatever change would be forthcoming would require changes to statute, and in the communication to the OMB Director we, of course, have pointed that out to him and said we would be happy to work with him.

The Chairman. I think that's an appropriate addition. Indeed, they have in effect suggested that you be put on budget and subject to OMB direction, but that is not the current statute.

Mr. Corcoran. Well, as our Chairman has said, Mr. Chairman, it's one thing for the Federal Government in its budget process to have the entire fiscal activity of the Government coordinated in one document so that the Congress and the people of the United States can see the fiscal impact of Government spending, but the other issue, which I think the Congress wisely separated insofar as the creation of our Corporation, is that when you are attempting to develop these commitments and to bring about the partnership which has to exist between the Government and industry to develop this technology, it would be very, very difficult for us if we had to submit it to the quarterly review and other activities that the typical agency of Government has in its relationship with OMB, and I don't think, based on the discussions that I have had that that is contemplated at all.

It is a concern. We are aware of the concern, and we will monitor that concern.

The Chairman. It bothers me, not that OMB would seek to express in budgetary terms the impact of the spending by the Synthetic Fuels Corporation, as you have expressed it, that's entirely appropriate, that they should seek to reflect that in appropriate Federal documents, but I don't believe your contract authority is going to fit guidelines established by OMB.

Instead it is going to fit with how best you can develop the program that you have been constrained by statute to develop. The contract authority, as well as the outlays that may occur, will flow from the program rather than the other way around. To try to constrain the program to fit a schedule of contract authority just seems to me to be outside of the scope and adverse to the intent of the statute.

Mr. Noble. You are exactly correct, sir. There is another factor in it which is not well understood. But we in the approach that we have taken, we have asked the private sector to put a great deal of money of theirs up front before, and this goes to the area of design of these big plants—there's millions of dollars—if they are to do this and we are in turn restricted in our flexibility, it could cause some very serious questions and concerns on their part as far as whether they want to do this up front spending when we lose our flexibility.

The Chairman. Let me first yield to the distinguished Senator from Virginia, Mr. Warner, and I will follow up some of the questions in a few minutes.

Senator Warner. Thank you, Mr. Chairman.

I welcome Chairman Noble back and by his side, hopefully, a newcomer as vice chairman.

When I look at Chairman Noble an old refrain of Rudyard Kipling's is brought to mind. It was written around the turn of the century about the plight of a British army soldier. His name was Tommy. And the refrain went: "It's Tommy this and Tommy that, and when the war is over chuck him out, the brute. But when the guns begin to shoot, 'tis the hero of his country."

The point being that as energy prices drop it becomes harder for you to sell the mission of your agency. But you have, Mr. Chairman, shown the resolve that lesser men fail to have and would have departed this city. But I am glad to see you back there and still determined to make this program work. I hope that energy prices will not engulf this Nation again, but should they, you might, if you're still around, be the hero of your country.

And, Mr. Corcoran, you bring hopefully to this Agency a knowledge of the Congress which is indispensible, since this Agency is the creature of the Congress, in many respects more so than others, and your knowledge of the Congress, the ability to deal with Members, and to continue to get their support is going to be essential.

I'm interested in the Parachute Creek project. I visited that 2 years ago. You indicate in your direct testimony that sentence you use: "It will be on-line in due course." Could you be a little more precise?

Mr. **Noble**. The Parachute Creek, Union, phase I, Senator, has been—and incidentally this is a very good example of why we really need a synthetic fuels program at this time—this is a project and a company that has committed almost 40 years to research in the development of oil shale, and they had run a pilot plant of about 1,000 barrels a day for about 10 years.

And yet when they scaled that up 10 times—and many of these scale-ups are much bigger than 10—they have had very serious problems in the startup. They know the technology works. They ran it for, as I say, 10 years. But they are having significant problems. We do anticipate that that project will solve its problems.

We had a recent briefing. They are now in the process of restarting it after a considerable amount of reconfiguration on a certain portion of the project, but we do anticipate that it will be in production.

Senator **Warner**. You keep dropping your voice when you get to the date. [Laughter.]

That's a skillful way to testify, but I'm listening, unfortunately.

Mr. **Noble**. This is the whole intent of this type of an effort. You know, the Sasol project over in South Africa spent literally 3 years using a technology that had worked very well for the Germans, 100 to 200 barrels a day, but when they scaled it up, I think to 5,000 barrels a day, it was 3 years before they got that first drop of production after they finished the plant, 6 years before they got it up to design level of production.

However, when they built the second and third ones, the third one they had it done within about—up to design production within just a few months after they finished the plant. So it's the reason that you need to get these technological scale-up troubles out of the way.

Senator **Warner**. I was just quite interested. I am so hopeful it does function, because that's a vast resource of energy.

But let's turn to a subject which you and I have discussed through the years, and that is coal. I'm still quite interested in these coal-water projects and, as you know, quite frankly several of my constituents have proposals in. But I address this question in the broader frame. I just hope that we will start some of these coal-water projects in Virginia, so much the better, but, if not, then you have my equally strong support.

Where are we now? I know that you had concern that there was a private operation with the Standard Oil Co., but as I look through the Sohio letter I'm not wholly convinced that that the proposed project by Sohio gives us justification to side-step several that you are now looking at for purposes of grants, guarantees.

Mr. **Noble**. Senator, the Board at the last meeting has asked the staff to very carefully review the situation. They will report back to us in March.

Senator **Warner**. When you say review the situation, what's the antecedent of "situation"?

Mr. **Noble**. Well, the situation as to whether or not—and this is the test that we must provide because the statute says that we can't do something that the marketplace, that the private sector will do by itself.

Senator **Warner**. I understand that.

Mr. **Noble**. And with the Sohio letter in front of us we did have to go back and readdress. There are some very serious questions. I understand Sohio also applied to DOE recently for assistance there, but I don't want to get into that. We are addressing the whole question of whether or not the private sector will do it without our assistance. If not, we intend to assist the coal-water solicitation.

Senator **Warner**. Let me see if I can recap what you said. You are going to go back and look at the Sohio project to see whether this sort of preempts your going ahead with assistance in this area; is that correct?

Mr. **Noble**. We're going beyond that. We're going to see as best we can what's being done in the whole area of the private sector to see if they would in fact, which we have to do under the statute, to see if they would do this without our assistance. If we think that they probably won't—and the utility boiler is quite a lot larger and more costly than the industrial boiler. It also has the potential of displacing more oil by, I think, some 10-to-1, so we are going to look at it very carefully.

The staff is doing that now and will report to our board at the March meeting.

Senator **Warner**. You are looking at it very carefully. You haven't reached any conclusions?

Mr. **Noble**. Not yet, no, sir.

Senator **Warner**. And the proposals that are in various parts of the country are still under consideration?

Mr. **Noble**. That's correct.

Senator **Warner**. And like me you come to the conclusion that on its face this Sohio letter of February 1, 1985, which I would like to have included in the record, Mr. Chairman, at this time does not suddenly preempt the field from your jurisdiction?

The CHAIRMAN. Without objection.

[The letter follows:]

SOHIO THE STANDARD OIL COMPANY
MIDLAND BUILDING, CLEVELAND, OHIO 44115-1098
TELEPHONE (216) 575-4141

February 1, 1985

Mr. Edward E. Noble
Chairman, Board of Directors
United States Synthetic Fuels Corporation
2121 K Street, N.W.
Washington, D. C. 20586

Dear Chairman Noble:

We have taken notice of the U. S. Synthetic Fuels Corporation's withdrawal of the solicitation for industrial coal-water fuel projects. The Standard Oil Company (Ohio) believes that the technology, economics and resources for private commercialization of coal-water fuels for use in both industrial and electric utility boilers are already in place. There are a significant number of private participants, demonstrating that private industry is presently developing--on its own--the base of knowledge and experience required for successful industrial and utility consumption of this fuel. These market forces, already in motion, should be allowed to determine the rate of implementation of the coal-water fuel option. Our conclusion is that it is clearly not necessary for the Synthetic Fuels Corporation to provide assistance to either industrial or utility coal-water fuel projects.

Sohio's business objective with respect to alternate energy development is to apply its resources (manpower, raw materials and technology) to commercialize business opportunities in the alternate energy field in both the short- and long-term. Some of these businesses, because of the preliminary stage of demonstration and optimization of technologies, will take a longer time period to commercialize (e.g. oil shale, coal gasification, coal liquefaction). In light of current uncertain market conditions, these longer-term projects will most likely require SFC assistance. Other alternate energy businesses, such as coal-water fuels and cogeneration, are already on the verge of being commercial. Private industry, without SFC involvement, should be encouraged to proceed with effective and economically efficient commercial projects.

Sohio's Advanced Fuels Technology subsidiary (AFT) has demonstrated the effectiveness of its proprietary technology to produce high-quality, beneficiated coal-water fuel at its Bridgeport, New Jersey pilot plant. Sohio has demonstrated the successful conversion of burners to use coal-water fuel in industrial boilers and, in 1985, Sohio will complete the design and engineering for its first commercial-size facility. Sohio is in the process of negotiating agreements with several major utilities for coal-water fuel from this plant to substitute for the residual fuel oil currently being consumed. One agreement for joint engineering studies is already in place and work is underway to determine retrofit requirements. Sohio has proposed to assist the utilities in the cost of retrofitting existing boilers.

Our confidence is based on our own work and that of a licensee, Nycol, who has been producing coal-water fuel in Sweden for several years. Nycol's fuel is under contract and is going into its second year of use in a district heating station in Stockholm, Sweden.

As you may know, other companies in the United States, Canada and Europe are already testing coal-water fuels in major utility-type installations. Cape Bretton Development Company in Sydney, Nova Scotia, Canada, currently operates a 40,000 tons per year coal-water fuel plant. The fuel from Cape Bretton is being burned at New Brunswick Electric Power Company's Chatham Power Station for an extended demonstration. The Electric Power Research Institute is conducting a comparative evaluation of utility-sized burners using coal-water fuels from several manufacturers on utility boilers next year. There are several additional private-sector utility demonstrations planned for Boston Edison's Mystic Station and Florida Power and Light's Sanford Station.

Sohio is certain that these private-sector programs will result in the most efficient and cost-effective commercialization of coal-water fuels technologies. We therefore believe it is unnecessary for the SFC to commit its resources to industrial and utility coal-water fuels projects which are already being expanded and commercialized by the private sector. The uncertainty caused by a potential SFC program could serve to delay or discourage the private sector initiatives which are already being pursued. We urge you to direct available funds to other project areas that may need such support in view of the longer term development efforts that will be required.

I would be happy to discuss this matter further with you.

Sincerely,

F. L. Poska

F. L. Poska
Director, Development & Technology

FLP/lo
0680L

Mr. **Noble**. No, sir, not until we really look at the whole question.

Senator **Warner**. Mr. Corcoran, do you wish to add any thoughts to this, because I know you are quite active in this area, also?

Mr. **Corcoran**. Senator Warner, I would add a couple of points. As our Chairman has said, we have evaluated the coal-water slurry issue and have made a decision with respect to its use for industrial boilers.

However, the Corporation is still evlauating the need for the use of coal-water slurry mixtures by utilities, and what we are attempting to do and what, as he said, the Board directed the staff to do in preparation for our next Board meeting on March 19, is to get the facts on that need and, secondly, determine just what the apparent obstacles to developing that market for utilities might be.

And then, thirdly, to determine whether or not there is some way in which the Corporation can be of use to overcome those obstacles. And so, as you have said, Senator, it is still under very active consideration and we are not prepared at this point to make a decision.

Senator **Warner**. I presume you have followed this report on the Columbian coal situation. I just cite it as an example of where beyond our shores rests the ability to mine coal now at a cost not even competitive but below what we can do here in the United States. It is the location of our coal with respect to utilities that gives them the advantage, that transportation cost, what little edge they have remaining.

I think it is essential that we keep our coal industry viable in terms of our long-term national defense needs. Therefore, I am looking to this technology as being one of the means to rescue coal from an otherwise darkening worldwide competitive situation.

Mr. **Noble**. We share those concerns, sir.

Senator **Warner**. That's in a good loud voice.

Mr. **Noble**. Good and loud.

Senator **Warner**. Thank you, Mr. Chairman.

The **Chairman**. Thank you, Senator Warner.

Just one point I think needs to be stressed here at this point. I could parenthetically note the exchange that took place before a House committee yesterday in which Mr. Stockman was described, at least by press reports, as having described this program as a waste.

I understand his opinion. He hasn't varied in that opinion over the years. I don't share his opinion and I'll let it go at that for today and in this forum.

[An article from the Wall Street Journal dated Thursday, Februray 28, 1985, submitted by Senator McClure follows:]

[From the Wall Street Journal, February 28, 1985]

## STOCKMAN CALLS $8 BILLION SYNFUELS FUND WASTE AT HOUSE BUDGET PANEL HEARING

(By Laurie McGinley)

**Washington.**—White House Budget Director David Stockman called the $8 billion program for synthetic fuels production a "waste," suggesting he'd welcome congressional efforts to end it.

Mr. Stockman, in an appearance before the House Budget Committee, agreed with assertions by Rep. Howard Wolpe (D., Mich.), that the synfuels program represented "corporate welfare." Rep. Wolpe, who wants to abolish the program, criticized the administration for proposing sharp domestic-spending cuts for fiscal 1986 when it hadn't asked Congress to rescinded the $8 billion already appropriated for synfuels subsidies.

Mr. Stockman, a longtime opponent of the synfuels program, said the adminsitration couldn't ask Congress to prune the progam because of an agreement reached last September between the White House and congressional supporters of synfuel subsidies. At that time, congressional synfuels proponents agreed to reduce the size of the Synthetic Fuels Corp. fund by $5 billion, to about $8 billion. The administration, in return, promised to consider the matter closed and refraim from seeking further reductions in the program.

The budget director's remarks were part of a four-hour hearing characterized by repeated, and often heated exchanges between Mr. Stockman and committee members over President Reagan's fiscal 1986 budget proposals. Members of both parties criticized the administration on a wide variety of issues, from the massive defense buildup to propose cuts in nutrition programs and plans to hire more Internal Revenue Service agents.

### STOCKMAN'S FUTURE

Early in the hearing, Rep. Thomas Downey (D., N.Y.), asked Mr. Stockman about a news report that White House officials, upset by the budget director's outspokenness, would welcome his resignation. "Will you still be here April 15?" asked Rep. Downey. "I plan to be here," Mr. Stockman replied. "I have something to contribute, and I think that's recognized downtown." The budget committee is scheduled to complete work on the first House budget resolution by April 15.

Mr. Stockman created an uproar recently when he called the nation's military retirement programs bloated and showed little sympathy for the plight of debt-ridden farmers. But White House spokesman Marlin Fitzwater said yesterday that, although chief of staff Donald Regan talked to Mr. Stockman about his remarks, he didn't request Mr. Stockman's resignation. And Mr. Fitzwater added that Mr. Stockman's comments about synfuels spending weren't likely to roil anyone in the White House since the administration has long questioned the need for spending large amounts of money on synfuel production.

### SLUSH FUND

Several committee members attacked the administration for proposing drastic domestic spending cuts for fiscal 1986 while increasing defense spending authority to $313 billion. One of the sharpest exchanges occurred when Rep. George Miller (D., Calif.) claimed that reductions in child-nutrition programs and other programs for the needy have increased hunger and infant mortality. "That's not correct," shouted Mr. Stockman, contending that infant mortality was still declining, although at a slower pace.

Rep. Chet Atkins (D., Mass.) took issue with the administration's practice of using higher inflation projections for the Pentagon than for other government departments, saying it created a $2 billion "slush fund" for the military. Rep. Connie Mack (R., Fla.), who treated Mr. Stockman more gently than most of the other committee members, began his remarks by saying, "I don't think it's likely that Congress is going to support this administration's request on defense spending."

Neither Republicans nor Democrats will support it. Rep. Mack said.

### IRS AGENTS

On another issue, Rep. William Goodling (R., Pa.) wanted to know why, given current budget constraints, the administration wanted to hire 5,000 more IRS agents. He said he was already getting complaints that agents were "harassing my constitutents." Mr. Stockman replied that the agents would be in the "collection, not harrassment, business," and that the increased revenue would more than pay for their salaries.

Separately, the nonpartisan Congressional Budget Office said that President Reagan underestimated the deficits contained in his recently released budget proposal.

If all of the president's proposals are adopted, the office estimated that the federal budget deficit in fiscal 1986 will reach $186 billion and will stay at or near that level for the rest of the decade. The president projected a deficit of $180 billion in fiscal 1986, declining to $165 billion in 1987. $144 billion in 1988 and $82 billion by fiscal 1990.

The differences occur mostly because the CBO's forecast of economic performance are more pessimistic than the president's.

Mr. CORCORAN. Mr. Chairman, if I might, I think he was misquoted. I think he was referring to our waistline and we've been tightening our belts.

The CHAIRMAN. We have indeed, from several different actions, and I hope you're right.

Senator WARNER. I suggest you not invite him to clarify it. [Laughter.]

The CHAIRMAN. As you know, the original statute had a date for the submission of comprehensive strategy, which was June 1984. We are all aware of the difficulties you have had over the last several years in formulating a program, let alone a comprehensive strategy. We know, too, that you have operated without a quorum of the Board most of the time since last April.

We have not pressed you on that comprehensive strategy and I do not do so now. I only mention it because, as we have discussed at other times, I want to reiterate for the record that a comprehensive strategy, in the terms expressed in the statute, to be useful to us would have to be based upon some experience. Until you have had the opportunity to go through your first phase solicitation and awards, you are not really in a position to outline a comprehensive strategy much beyond where you are now.

Am I correct in that?

Mr. NOBLE. Well, basically so, but I will say that I think this Board has really made tremendous progress, Senator, with the business plan, and we have now identified pretty well how we should try to allocate the resources that we have at this time.

We have identified where we have gaps in the program. As I say, Tom here has done, I think, an excellent job pulling that together. I did ask Tom at the last Board meeting, after they kind of patted him on the back for what he'd done, but said now, have some dates for us for the March meeting, which he is trying to put that in order.

So we are trying to schedule it, even though in some of these things, we can only drive the process so far, and then we have to have the sponsors move when we get to the negotiating area. But we have asked the committee to give us some target dates, and we're hoping that we can schedule that and move it right along.

The CHAIRMAN. Well, the only reason for my mentioning it at this time is, I don't want you to believe that because that date has come and passed and you now have a quorum that you are under some constraint to produce a final document almost immediately. We want that document to be a reasoned document based upon your knowledge and experience so that it can be a good guideline to us for what should be done and so that we can react to it on the basis of good technical information and a good evaluation.

Mr. NOBLE. I agree. Otherwise, it would really be worthless.

Tom, do you have any comment on that?

Mr. CORCORAN. Well, Mr. Chairman, I want to say that I appreciate your consideration in this respect. The committee, as our chairman has said, has been directed to report back at the March 19

Board meeting with a tentative timetable for the submission of the comprehensive strategy to the Congress, and obviously the timetable in the statute weighs heavily in our considerations.

So we would want to work with you and other Members of Congress to seek your counsel in determining just what would be the appropriate way to respond to that requirement.

Second, and perhaps even more important, as you point out, the approach to developing the comprehensive strategy has to be based on the first phase of the program, and we don't have as much experience as we would like as a data base, so to speak, to develop the recommendations for the long-term strategy.

And so I particularly appreciate your comments with respect to the need for that experience as a foundation for developing long-term strategy.

The **Chairman**. I appreciate that statement and I assume that you will keep this committee informed as to your progress toward that target. We will work with you as best we can to respond to your timetable needs so that you have the opportunity to do the kind of work that you want to do without being pushed unduly rapidly by us. That's not an invitation to delay, obviously, but a recognition of where we are.

Senator Rockefeller.

Senator **Rockefeller**. No questions, Mr. Chairman.

The **Chairman**. Let me conclude then this portion by saying there will be some questions to be submitted for responses in writing. If members of the committee have questions to be submitted, I hope they will do so by the end of business today so that we can get your responses in time to reflect it in our budget actions.

I do want to you, Mr. Noble, underscore what Senator Warner said. Lesser people would have folded under the pressure and left town before now, and I am glad you have not. And to you, Mr. Vice Chairman. It's a pleasure to have you aboard working on this program.

I think in spite of the increasing difficulties in the energy field, the prospects for the Synthetic Fuels Corporation activities are certainly much brighter because of your presence and your work. Thank you both.

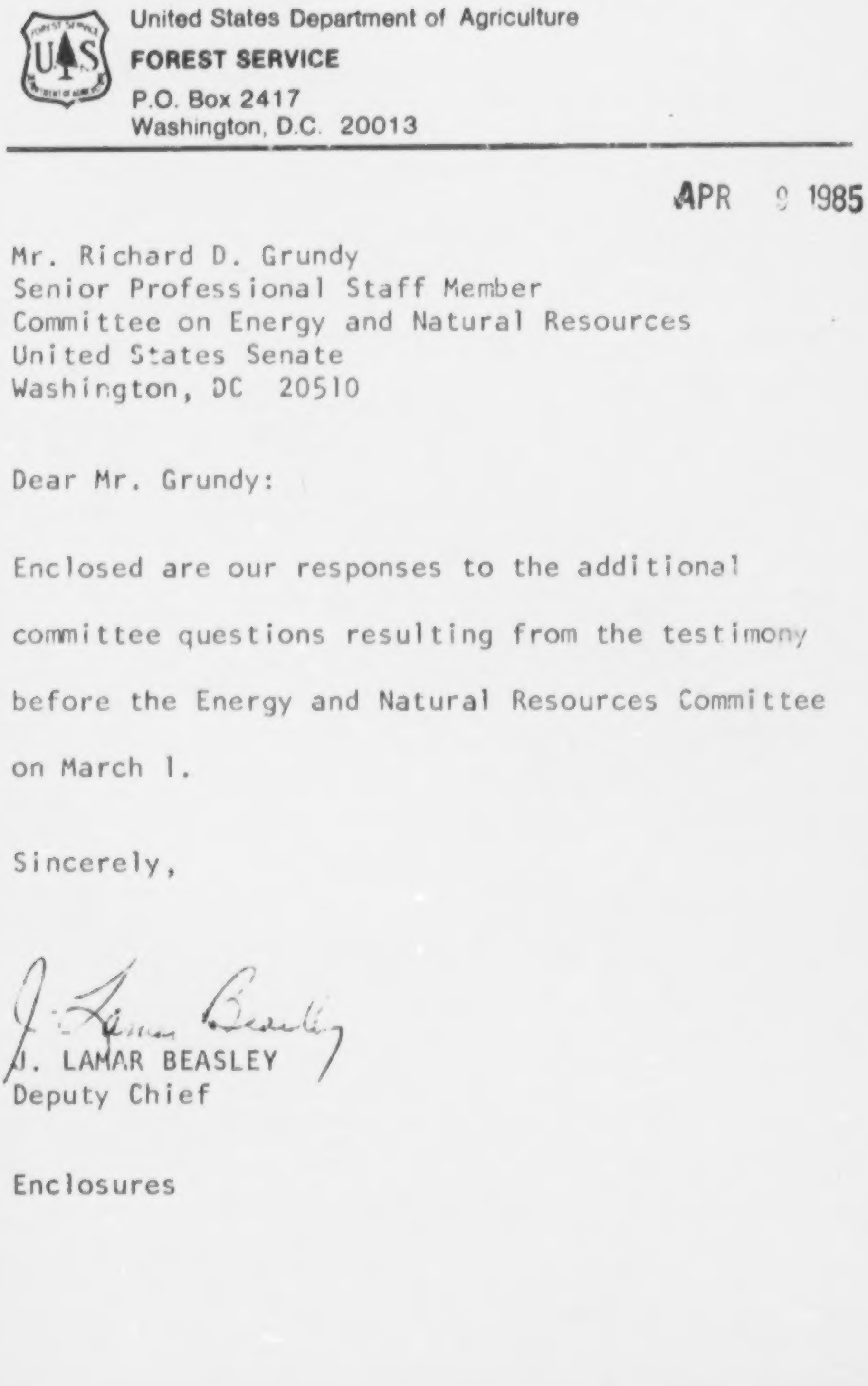
Mr. **Noble**. Thank you, Mr. Chairman.

The **Chairman**. Thank you. The committee is adjourned.

[Whereupon, at 12:25 p.m., the hearing was recessed, to reconvene Monday, March 4, 1985.]

## APPENDIX II

### Responses From Mr. Beasley to Additional Committee Questions



United States Department of Agriculture
**FOREST SERVICE**
P.O. Box 2417
Washington, D.C. 20013

APR 9 1985

Mr. Richard D. Grundy
Senior Professional Staff Member
Committee on Energy and Natural Resources
United States Senate
Washington, DC 20510

Dear Mr. Grundy:

Enclosed are our responses to the additional committee questions resulting from the testimony before the Energy and Natural Resources Committee on March 1.

Sincerely,

J. Lamar Beasley
J. LAMAR BEASLEY
Deputy Chief

Enclosures

## ADDITIONAL COMMITTEE QUESTIONS

### FY 1986 Legislative Initiatives

1. Question: Would you provide for the record a list of legislative initiatives accompanying the President's fiscal year 1986 budget? Would you include:

   (A) A statement of purpose;

   (B) Proposed language (if available at this time, but, if not, an indication of when it will be available);

   (C) An explanation of the language; and

   (D) Whether, in your judgement, such legislation would be forwarded to the Energy and Natural Resources Committee or to the Appropriations Committee?

   Answer:

   PAYMENTS TO STATES--NET RECEIPTS:

   Statement of Purpose: The purpose of this proposal is to convert from the sharing of gross receipts to sharing of net receipts after expenses. In concept, this proposal is like profit sharing in the private sector. Two primary reasons underlie this proposal: (1) Under current law the Federal government, after giving States their share of gross receipts and after paying the costs, often realizes a loss; and (2) sharing receipts on a gross basis, as it is now done, rather than on a net-of-costs basis, gives States the incentive to seek heighten management of land resources even though costs exceeds total receipts.

   Proposed language: To be submitted by early summer.

   Explanation of language: Proposed legislation would allow the Federal government to deduct from National Forest, and from Oregon and California grant land receipts, those program costs which are necessary to realize and continue such receipts. Shares of receipts to be paid to State or county governments would be calculated after costs are deducted.

   The proposed legislation will be transmitted to the President of the Senate, with assignment by the Parliamentarian. We expect it to be referred to the Energy and Natural Resources Committee, but it could be referred to another Committee.

   RECREATION USER FEES:

   Statement of Purpose: During the past several years, there has been considerable discussion about increasing National Forest System recreation user fees to help close the gap between Forest Service costs of providing recreation opportunities to the public and the current amount of fees collection from recreation users. To accomplish this increase, the Department of Agriculture will propose legislation to allow recovery of a larger share of the government cost of providing recreation facilities and services.

Proposed language: To be submitted by late spring.

Explanation of the language: The draft bill would authorize the Secretary of Agriculture to charge recreation use fees whereever special outdoor recreation sites, facilities, or services are provided in the National Forest System. This provision would expand the types and numbers of sites at which charges could be made under section 4(b) in the Land and Water Conservation Fund Act of 1968.

The proposed legislation would not change the present method or authority used for recreation special uses such as ski areas or recreation residences.

The proposed legislation will be transmitted to the President of the Senate, with assignment by the Parliamentarian. We expect it to be referred to the Energy and Natural Resources Committee, but it could be referred to another Committee.

GRAZING FEE SYSTEM:

Statement of Purpose: The Public Rangelands Improvement Act (PRIA) requires two reports to be submitted to Congress by December 31, 1985--the grazing fee study and a report on the experimental stewardship program. When acted upon by Congress, the grazing fee formula will establish fees for use of rangelands on the National Forests for 1986 and beyond.

Proposed Language: The final Grazing Fee Report, with recommendations will be submitted by early summer.

Explanation of the language: The final Grazing Fee Report will recommend a grazing fee schedule.

The final Grazing Fee Report will be transmitted to the President of the Senate. We expect it to be referred to the Energy and Natural Resources Committee.

FOREST SERVICE/BUREAU OF LAND MANAGEMENT INTERCHANGE:

Statement of Purpose: About 63 percent of Federal lands in the lower 48 States is managed by BLM and the Forest Service. BLM has responsibility for 174 million acres and the Forest Service has responsibility for 168 million acres. Both agencies have a similar mission to manage these lands under multiple-use and sustained-yield principles. In many cases, the land managed by the two agencies is unterminglied or adjacent. This has, in some locations, resulted in unnecessary duplication in organization, facilities, and staffing in both agencies. There are 71 communities throughout the western States which have both Forest Service and BLM offices.

The interchange has three major objectives: (1) enhance public service; (2) improve administrative efficiency; and (3) reduce costs.

Proposed language: To be submitted by early summer.

Explanation of the language: The budget proposes to interchange administrative jurisdiction of about 30 million plus acres: tentatively about 19 million acres of BLM land will be transferred to the Forest Service and about 15 million acres of Forest Service land to BLM. An important component of this interchange is a complete transfer of the Oregon and California Grant Lands from BLM to the Forest Service. No changes are proposed in Alaska.

The proposed language will transfer the involved lands and unify the underlying minerals management responsibilities under the Agency that manages the surface resources.

The proposed legislation will be transmitted to the President of the Senate. We expect it to be referred to the Energy and Natural Resources Committee.

2. Question: Would you provide for the record a list of any fiscal year 1985 supplemental or deferral requests by appropriations account?

Answer: The Forest Service is requesting a 1985 supplemental for the National Forest System appropriation in the amount of $61,247,000. The supplemental will be used to reimburse the costs of fighting forest fires in fiscal year 1984.

There are no deferrals pending in appropriated funds. The only planned deferrals are annual request to defer the balances for brush disposal ($42.7 million) and timber salvage sale ($6.2 million) funds, after 1985 program needs were covered.

3. Question: Would you provide for the record a list of any current or anticipated fiscal years 1985 and 1986 rescissions or deferrals pursuant to the Budget and Impoundment Control Act assumed by the proposed budget for fiscal year 1986; copies of the relevant budget justifications; and the status of such proposed actions?

Answer: The budget for fiscal year 1986 includes a 1985 rescission proposal of $15,510,000 to comply with Section 2901 of the Deficit Reduction Act of 1984 (P.L. 98-369).

Section 2901 of the Deficit Reduction Act of 1984 requires the Executive Branch to make significant management improvements to achieve savings in motor vehicles, travel, public affairs, publishing, and consulting services. The Director of the Office of Management and Budget is required to report to the Congress on the savings achieved.

The proposed Forest Service rescission by appropriation is as follows:

### Summary of Deficit Reduction Act
### Section 2901 Savings

(Dollars in thousands)

| | FY 1985 Budget Authority | Motor Vehicles | Travel | Public Affairs, Publishing, and Consultants | Total | FY 1985 with Rescission |
|---|---|---|---|---|---|---|
| Forest Research | $ 120,964 | $ -275 | $ -351 | $ -297 | $ -923 | $ 120,041 |
| State and Private Forestry | 58,315 | -137 | -200 | -126 | -463 | 57,852 |
| National Forest System | 1,045,680 | -6,777 | -3,055 | -2,302 | -12,134 | 1,033,546 |
| Construction | 36,972 | -916 | -523 | -483 | -1,922 | 35,050 |
| Land Acquisition | 43,603 | -46 | -12 | -10 | -68 | 43,535 |
| Other Appropriated Funds | 4,840 | -- | -- | -- | -- | 4,840 |
| Permanent Appropriations | 386,095 | -- | -- | -- | -- | 386,095 |
| Trust Funds | 153,270 | -- | -- | -- | -- | 153,270 |
| Reforestation Trust Fund | 31,615 | -- | -- | -- | -- | 31,615 |
| Total | $1,881,354 | $-8,151 | $-4,141 | $-3,218 | $-15,510 | $1,865,844 |

1/ In addition, $2,241,000 will be saved through reduced obligations in Permanent and Trust Funds.

The rescission proposal is now being considered by both Houses of Congress.

4. Question: In your budget request you indicate that the Forest Service will require $49.8 million to manage the California and Oregon Grant Lands (O&C lands) if transferred from the Bureau of Land Management. The Bureau estimates that such an exchange would reduce its budget by $54.2 million. How do you account for this $4.5 million difference in the cost of managing these lands?

Answer: The 1985 Bureau of Land Management budget contained $54,289,000 for Oregon and California grant lands. The 1986 President's Budget is $49,785,000. This $4.5 million difference consists of the following:

A program decrease in road maintenance of $756,000. This reduction is expected to be offset by increased revenues contributed by industry users due to the increased level of timber harvest, from 1,132 million board feet in 1985 to 1,160 million board feet in the 1986 President's Budget. Funding for this activity was not included in the Department of Interior's request to OMB and is not in the 1986 President's Budget.

A decrease in timber management of $2,674,000 and a decrease of reforestation and stand improvement of $1,425,000. This decrease from 1985 is primarily due to a 1985 Congressional add-on of $5.4 million. This add-on was to implement timber management plans for the O&C lands to do additional forest development practices.

Program increases in timber protection and other forests resources ($287,000), and in planning and data management ($130,000) is provided to maintain these activities at their 1985 levels and to provide for increased plan maintenance and additional coordination with State and local governments.

In addition to these programs reductions, savings will be generated through the 5% pay cut and other administrative savings.

5. Question: Please provide the Committee with the backlog of lands identified for acquisition under the Land and Water Conservation Fund for the National Forest System.

Answer: The following is a list of the backlog of lands identified for acquisition under the Land and Water Conservation Fund. Acquisition of all authorized Forest Service purchase areas, however, is not a tenable goal. There are over 1.9 million acres in such areas with an estimated cost of $2 billion--about the same as the entire Forest Service budget. At a time of considerable restraint in total Forest Service program funding, it is necessary to emphasize managing the land the Government owns more efficiently rather than adding to the Federal estate. While it is necessary to impose a moratorium on land purchases at this time, efforts to improve management efficiency through land exchanges will continue.

| Management Area | Acres | Cost $000 |
|---|---|---|
| National Recreation Areas | | |
| Arapaho (CO | 762 | $ 2,425 |
| Flaming Gorge (UT & ID) | 20,140 | 2,473 |
| Hells Canyon (OR & ID) | 4,520 | 4,297 |
| Mt. Rogers (VA) | 7,847 | 6,298 |
| Sawtooth (ID) | 7,385 | 27,860 |
| Spruce Knob-Seneca Rocks (WV) | 28,000 | 18,500 |
| Oregon Dunes (OR) | 853 | 1,321 |
| Whiskeytown-Shasta Trinity (CA) | 239 | 471 |
| Rattlesnake (Wilderness, MT) | 1,877 | 1,500 |
| Cascade Head SRA (OR) | 92 | 497 |
| National Wild and Scenic Rivers | | |
| M.F. Feather (CA) | 1,580 | 4,068 |
| M.F. Clearwater (ID) | 403 | 944 |
| Flathead (MT) | 4,939 | 13,527 |
| Illnois (OR) | 1,583 | 2,544 |
| M.F. Salmon (ID) | 1,716 | 4,000 |
| N.F. American (CA) | 4,517 | 850 |
| Eleven Point (MO) | 4,415 | 2,458 |
| Rogue (OR) | 92 | 380 |
| Skagit (WA) | 4,382 | 11,334 |
| Chattooga (GA) | 890 | 1,120 |
| Pere Marquette (MI) | 1,139 | 1,325 |
| Main Salmon (ID) | 1,114 | 4,700 |

| Management Area | Acres | Cost $000 |
|---|---|---|
| National Trails | | |
| Appalachian | 13,822 | 4,545 |
| Pacific Crest | 1,160 | 960 |
| Wilderness | | |
| Alpine Lakes (WA) | 97 | 125 |
| Boundary Waters Canoe Area (MN) | 280 | 1,870 |
| Frank-Church-River of No Return (ID) | 6,813 | 3,900 |
| Other Wilderness 1/ | 94,520 | 94,595 |
| Lake Tahoe Basin (CA & NV) | | |
| Other Than Santini-Burton | 2,460 | 1,700 |
| Santini-Burton (PL 94-586) | 9,000 | 180,000 |
| Endangered Species | | |
| Endangered Species (CA, California Condor) | 1,397 | 1,364 |
| Endangered Species (MI, (Kirtland's Warbler) | 510 | 617 |
| Wildlife Habitat Management | | |
| Inholdings 1/ | 288,264 | 250,000 |
| National Forest Composites 1/ | 1,367,885 | 1,346,972 |
| Totals | 1,896,126 | $2,009,040 |

1/ These figures will be adjusted as new areas are added to the Wilderness System and Threatened and Endangered Species are listed.

QUESTIONS SUBMITTED BY SENATOR WALLOP

Forest Service/ Bureau of Land Management Interchange

6. Question: Appropriations language allocating $64,185,000 for expenses necessary to implement the Forest Service - Bureau of Land Management boundary change appears in the National Forest System section of the Appendix to the President's Budget. Briefings to authorizing Committees have consistently emphasized the opportunity for public and Congressional participation as the interchange is planned. Shouldn't public hearings be completed before you ask for implementation authority?

Answer: Public meetings will be completed in the areas affected by the interchange before implementation authority is requested. This authority will be requested in separately submitted legislation. The Forest Service and Bureau of Land Management are currently planning an extensive round of public meetings in the areas affected by the interchange. The schedule of planned meetings, as of March 20, is as follows:

FS/BLM Interchange Public Meetings

| LOCATION | DATE | LOCATION | DATE |
|---|---|---|---|
| Region 1: | | Region 3: | |
| Montana | | New Mexico | |
| Butte | April 15 | Grants | April 9 |
| Billings | April 16 | Clayton | April 16 |
| Dillon | April 17 | Taos | Date to be announced |
| Missoula | April 16 | Carlsbad | Date To be announced |
| Great Falls | April 18 | | |
| North Dakota | | Region 4: | |
| Dickerson | April 17 | Nevada | |
| Idaho | | Reno | April 16 |
| Grangeville | April 12 | Elko | April 16 |
| Coeur d' Alene | April 15 | Ely | April 16 |
| | | Austin | April 16 |
| Region 2: | | Las Vegas | April 17 |
| Colorado | | Tonopah | April 17 |
| Steamboat | April 1 | Hawthorne | April 17 |
| Grand Junction | April 2 | Idaho | |
| Cortez | April 3 | Malad | March 13 |
| Canon City | April 4 | | |
| Wyoming | | | |
| Cheyenne | March 22 | | |
| Rocksprings | March 25 | | |
| Pinedale | March 26 | | |
| Big Piney | March 27 | | |
| Kemmerer | March 28 | | |

(Other meetings may be scheduled later.)

Land and Water Conservation Fund

7. Question: The Interior Budget contains proposed appropriations language which would repeal provisions of P.L. 96-514 which provide that revenues from Federal agency recreation fee collections be paid into the Land and Water Conservation Fund. If, as suggested by the Administration, those who benefit from a specific Federal service should pay the cost of providing that service, why should such funds be redirected away from the L&WCF to other programs?

Answer: The L&WCF Act provides for recreation fees to be placed into a special account to be administered in conjunction with, but separate from, the revenues in the Land and Water Conservation Fund. It also provides for these fees to be available for appropriation, without prejudice to appropriations from other sources, for any authorized outdoor recreation function of the agency by which the fees were collected.

The passage of P.L. 96-514 in 1981 provided for all recreation fees to go directly into the Land and Water Conservation Fund. This makes the fee receipts unavailable to the collecting agency for recreation purposes. If the section of P.L. 96-514 pertaining to fees were repealed, as called for in the Interior budget, the recreation fees would once again be available to the collecting agencies to provide the services for which the fees were collected.

### Grazing and User Fees

8. Question: Mr. MacCleery, your statement indicates that a legislative proposal is being developed to increase user fees. When can we expect to receive this legislation, and will there be consultation prior to submission of this language to the Congress?

Answer: A legislative proposal is being developed and we expect to submit it sometime in the near future. We will continue to consult with members of Congress about recreation programs and alternatives that effect present authorities for the collection of recreation fees.

9. Question: Do you contemplate proposing to establish admission fees to the National Forests?

Answer: We are exploring several alternative ways of closing the gap between recreation costs and revenue. We believe persons directly utilizing the recreation resources of the National Forests should pay an appropriate share of the costs of providing and maintaining those recreation opportunities. We see these as a general use fee, based on recreation use of the forest, rather than an admission fee to the forest. We anticipate consideration of this issue by the President's Commission on Outdoor Recreation Resources Review.

10. Question: You have made an assumption of an almost 100% increase in grazing fees on National Forest System lands to $13.2 million in 1986. Does that increase reflect the position of the Forest Service on the alternatives which will be contained in the grazing report?

Answer: Cash receipts from sale and use of grazing on National Forest System lands in fiscal year 1984 totalled $9,618,000. Fiscal year 1985 fee receipts will be slightly less than in fiscal year 1984.

The $13.2 million projected revenue for fiscal year 1986 was based on an alternative, which will be contained in the grazing fee report, to reach a market value of $4.68/head month, as determined through the appraisal of public land grazing and would be phased in over time through an implementation schedule.

11. Question: The grazing fee formula established by the Public Rangelands Improve Act (PRIA) expires at the end of 1985. If the Congress fails to act on the grazing fee issue by that time, how will the Forest Service establish the fee in 1986, and what is that fee likely to be?

Answer: The Forest Service would be guided by the Independent Offices Appropriations Act of 1952 and the OMB Circular No. 25 that states "Where federally owned resources or property are leased or sold, a fair market value should be obtained."

The value derived from the market value appraisal, which was done as part of the PRIA fee study, would be the source document for changing fees.

Grazing fees for National Forests in the 16 Western States would be calculated for each of six pricing areas as described in the appraisal report, which range from $4.68 to $8.55/head month. A 3-year phase-in period would be used to reach full market value. The westwide average for 1986 is estimated at $2.46/headmonth; a 45 percent increase above the current year fee of $1.35/head month.

## QUESTIONS SUBMITTED BY SENATOR WARNER

### Land and Resource Management Plans

12. I understand that all superintendents of our National Forests are required to prepare Forest Plans this year to serve as management standards for the next 50 years, with a periodic review occurring every 10 years.

Question: Could you track the approval process these Forest Plans must follow? What is the likelihood of modifying these plans once they are in the cycle, and must each plan be reviewed by you?

Answer: Land and Resource Management Plans are being developed for all administrative National Forests. These Forest plans establish management direction and broad long-range goals and objectives for 50 years. They provide specific direction for managing the National Forests for 10 years.

Forest plans will be reviewed at regular intervals and changes in short and long-term management are made as necessary following NEPA procedures. The plans will ordinarily be revised on a 10-year cycle, but at least every 15 years (36 CFR 219.10(g)).

The Regional Forester is responsible for approving all Forest plans in the Region. The Forest Supervisor has overall responsibility for preparation and implementation of the Forest plan and environmental impact statement (EIS). The Washington Office conducts a prelimary review prior to publication of draft Forest plan and EIS. This review is procedural in nature; its purpose is to ensure that national standards and guidelines have been met. Approval of the Forest plan remains the responsibility of the Regional Forester.

13. Question: I have particular concern with the George Washington National Forest's Proposed Land and Resources Management Plan. Of the 1.5 million acres which comprise the Forest, the plan targets 803,000 acres to be managed for timber production. The draft plan doubles the area to be clear cut, triples the annual timber harvest and proposes an additional 4,000 miles of new logging roads. What kind of consideration might you give to a plan that relies heavily on timber harvesting when the GAO has indicated that the Forest Service is spending more to produce and sell timber than it receives from receipts?

Answer: We appreciate the opportunity to clarify some of the figures and context of the George Washington National Forest Land and Resource Management Plan. The George Washington National Forest is comprised of 1.055 million acres rather that 1.5 million. Of this, 803,000 acres are classified "suitable for timber production;" however, this does not mean that all 803,000 acres will necessarily be managed for timber production.

The proposed alternative would allow a maximum timber harvest level that doubles rather than triples the annual harvest during the period covered by the plan. (The tripling of projected harvest was a projection of potential harvest over the 150 year planning horizon, and was not projected to take place within the first 100 years.) The projected harvest for the first 10 year period of the proposed plan projects harvesting 101.90 million cubic feet of timber products. The currently approved Timber Management Plan for the Forest projects a harvest of 104.30 million cubic feet for the 10 year period FY 1969-1979 even though the Forest never actually harvested more than 50 percent of that amount. The additional 4,000 miles of new logging roads is a speculative figure projected after 150 years.

The Land and Resource Management Plan for the George Washington National Forest is a proposed plan. Other alternatives to the preferred alternative were considered and all were presented to the public for comment. A great deal of concern about the proposed plan has been expressed and it is being re-evaluated in light of those comments. There will be undoubtedly be some changes from the preferred alternative, not only in the timber harvest levels but in other areas as well, before the final Forest plan is developed.

On February 26, Chief Max Peterson, and Deputy Assistant Secretary Douglas W. MacCleery testified before the Subcommittee on Forests, Family Farms, and Energy, Committee on Agriculture, House of Representatives, on the below cost sales issue. We have been particularly interested in assuring that the land management planning process fully evaluates both the environmental and economic implications of the resource management options and that economic and environmental tradeoffs associated with each Forest plan alternative be displayed in the planning documents.

The below cost sales issue is very complex and we need to look at all resources in both the short and long term. The testimony presented by Mr. Peterson and Mr. MacCleery was designed to update the Committee on actions that respond to questions and concerns that have been raised on the economics of National Forest System timber sales.

### Recreation Use

14. Question: In what activities are the Forest Service engaged to promote our National Forests as recreational areas for tourists?

Answer: It has not been our policy to promote recreation opportunities on the National Forests. However, the various Forests in response to a regional, state or local need endeavor to inform the public about their recreation environment. The Washington Office provides photographs and texts for national publications, as requested by publishers or writers.

The Forest Service provides various publishers of outdoor recreation user's guides and maps with information and advice on site condition and facilities available. We have been working with Rand McNally and other commercial firms for a number of years in this enterprise.

The District Rangers and Forest Supervisors provide information regarding opportunities on their National Forest. Forest maps, special interest brochures, Wilderness, Wild and Scenic River maps, and many other items are available to the potential visitor upon request. We do charge a fee for some of these items, others are provided free of charge.

The Jefferson and George Washington National Forests have cooperated with the Virginia Game Commission since 1930 on a Sportsman's Map that shows recreation opportunities on State and Federal lands. We have other such endeavors across the Nation that provide similar information in a cooperative vein regarding the National Forests.

Over all, the promotion of the National Forests for recreation has been a concern of individual Forests on a case-by-case basis, working with the private sector.

## QUESTIONS SUBMITTED BY SENATOR HECHT

### Watershed Management

15. I am pleased that watershed management is on the list for priority research; I see an increase of $1.2 million for soil, water, and air management. I hope this budget includes the hiring of qualified hydrologists to help address our critical water resource management problems in the West, especially water rights adjudication deadlines for Nevada.

Question: What I don't understand is the corresponding decrease of $2.5 million for watershed inventories and improvements when the West, and particularly Nevada, is still facing flooding and accelerated erosion problems on its National Forest lands. Could you provide a rationale for these two (related) funding proposals?

Answer: The increase in soil, water, and air management is to meet the growing importance of programs such as water rights and air resource management. Within the total budget, Forest Supervisors and Regional Foresters are meeting these legal needs by prioritizing management programs over improvement or inventory. The highest priority improvement and inventory activities are still being accomplished.

Flood damages in Utah and Nevada are a particular problem. The Intermountain Region has spent $20 million on flood damages from the 1983 and 1984 floods. Most of this amount was from emergency funding sources, which are available to control urgent damages such as accelerated erosion.

The Intermountain Region is also conducting flood repairs which do not qualify as emergency work. Funds have been directed from several program areas to repair damages to watersheds, fisheries, range, recreation developments, and transportation facilities. Further repair needs are being built into the planning process.

### Grazing Receipts

16. You estimate a total increase of $6.4 million in FY 1986 grazing receipts.

Question: What was the fee formula on which this estimate is based? When do you think the Department's grazing fee report will be ready for Congress?

Answer: Grazing fee receipt estimates for fiscal year 1986 were based on phasing in, over 3 years, a market value fee as determined by the "Appraisal Report Estimating Fair Market Rental Value on Public Lands."

The "Draft Grazing Fee Review and Evaluation Report" was released on March 29. After a 30-day public comment period, the final report will be submitted to Congress sometime in June.

### Payments to States

17. Question: What is your rationale for the proposed reduction of $172 million in payments to the States in FY 1986?

Answer: This reduction is based on a proposal to change payments to States from a sharing of gross receipts to a sharing of net receipts. The Forest Service would deduct from receipts the program costs which are necessary to manage the lands that generate the receipts. Shares of receipts to be paid to State or county governments would be calculated after costs are deducted.

In concept, this proposal is like profit sharing in the private sector. Two primary reasons underlie this proposal: (1) Under current law the Federal government, after giving States their share of the gross receipts and after paying the costs, often realizes a net loss; and (2) sharing receipts on a gross basis, as it is now done, rather than on a net-of-costs basis, gives States the incentive to seek heighten management of land resources even though costs exceed total receipts.

### Forest Service/Bureau of Land Management Interchange

18. Mention is made in your budget documents of the Forest Service-BLM Interchange Program, but no specifics are provided on staff or funding reductions at the State or district level.

a. Question: When do you expect to have this information for the Committee?

Answer: Forest Service and BLM field units are currently developing Implementation Guides which will provide details concerning staffing changes, schedules of various actions, and costs and savings to be achieved before and after legislation. This information will be available to the Committee during the summer.

b. Question: What do you expect the total implementation costs for this program will be?

Answer: Implementation will be phased over the period FY 1986 through FY 1988. Our preliminary estimates of the one-time costs to complete the interchange are in the range of $35 - $45 million. The Implementation Guides which are currently being prepared by field unts will provide a more detailed and accurate estimate of implementation costs.

## QUESTIONS SUBMITTED BY SENATOR DANIEL J. EVANS

### Housing Start Assumptions

19. I understand you forecast timber sale receipts and estimate road construction needs on estimates of housing starts.

a. Question: What role does housing starts estimates play in the development of Forest Service Budget estimates?

Answer: Anticipated harvest of timber from National Forests is based on estimates of what housing starts will be in the budget year. This is then used to help establish the overall timber management program, sell, harvest and road construction for that budget year.

b. Question: Is this the most accurate way of forecasting? Would lumber consumption figures be a more accurate way of estimating need and receipts?

Answer: Lumber consumption is, in large part, directly related to housing starts. Because of this close relationship, we do not feel that estimates of lumber consumption would provide a more accurate way of estimating harvest levels and, thus, receipts in the outyear budget.

c. Question: Are any of your other budget requests and assumptions based on housing starts?

Answer: No. Only those items related to the timber sale program are based on housing starts.

d. Question: On what housing start assumptions are your budget request based?

Answer: Estimates of harvest levels are based on housing start assumptions provided quarterly by OMB. At the time the budget was prepared this level was 1.9 million for 1986. The most recent OMB quarterly estimate is 1.81 million for 1986.

e. Question: What are the housing start assumptions of the Wharton School of Econometrics and Data Resources, Inc. for the same timber periods?

Answer: The housing start assumptions of the Wharton Econometrics Model and Data Resources, Inc., for FY 1986 are 1.72 million and 1.82 million respectively. These projections are updated quarterly and vary, depending upon the market situation at that time.

f. Question: How do you account for the differences between the projections upon which your Budget Request are based and those of Wharton and DRI.

Answer: The housing start assumptions provided by OMB are based on an evaluation and averaging of several housing start assumptions provided by a number of concerns, including those provided by both Wharton and Data Resources, Inc.

20. Question: Your FY 1985 Budget Request was based on assumed annual housing starts of 1.9 million. I have been informed your housing starts projections for FY 1985 have been revised downward to 1.7 million. Are road construction needs overestimated as a result of overestimating housing starts?

Answer: No. Road construction needs for any given budget year are determined, in large part, by needs for access into the National Forests for future years. Many roads constructed in FY 1985 will not be used for timber harvest until FY 1986 and beyond.

### Timber Sale Receipts

21. Question: The Explanatory Notes for FY 1986 Budget request state that timber sales receipts for FY 1985 will be $1,027,650,000. Is this your current estimate of timber sale receipts for FY 1985?

Answer: The value of $1,027,650,000 for FY 1985 is the most recent estimate of the anticipated receipts for the harvest of National Forest timber.

The projection of housing starts was lower, based upon more current information on consumer demands, interest rates, amounts of lumber imports, and other factors. The lower housing starts, which are a direct reflection upon timber product prices, is a reliable index of expected market demands. Because of the lower housing start projections and the Congressional reduction in expected harvest levels, the anticipated receipt estimates were lowered.

With the passage of the Federal Timber Contract Payment Modification Act of 1984, an additional $192,800,000 was added as anticipated receipts from timber sales returned to the Forest Service.

### Reoffered Timber

22. Question: The Explanatory Notes for the Forest Service 1986 Budget Request state the timber sales level provides for preparing and offering 8.1 billion board feet of new timber sales and the reoffer of 2.6 billion board feet of timber sales turned back as a result of the Federal Contract Payment

Modification Act of 1984. Later in the same document, you state that "of the 10.7 BBF timber volume to be offered in FY 1986, 2.6 BBF will be made up of timber sales that contain roads wholly or partially completed." Is the latter statement accurate? Of the 2.6 billion board feet of timber returned and resold under the Contract Modification Act, how much is accessed by roads wholly or partially completed?

Answer: Both statements are correct. It is estimated that nearly 90% of the 2.6 billion board feet of turn-back volume to be offered in FY 1986 is accessed by completed or partially completed roads.

## Timber Sale Appraisal Methodology

23. I understand the Forest Service is currently using a timber appraisal methodology known as Transaction Evidence Analysis (TEA) in Regions 8 and 9 and is testing TEA in Region 1.

a. Question: Please compare the variation in value between TEA and the more traditional residual value appraisal method.

Answer: Residual Value Appraisal, the system currently in use, establishes a estimated selling value of standing timber based on the current selling value of the finished product (boards) minus the estimated costs of producing the finished product from the standing timber. It reflects an estimate of what a purchaser of average efficiency would pay for the timber, if the purchaser were to harvest the trees immediately.

The Transaction Evidence Analysis appraisal method is based on the price purchasers have been willing to pay for standing timber under similar conditions. It reflects what a purchaser expects the timber to be worth at the time the timber is harvested. Thus, you would expect a variation between the values derived from the two methods.

b. Question: In situations where the use of TEA results in a higher appraised value than residual value analysis, has there been reduced bidding on the sale?

Answer: TEA is fully operational in Regions 8 and 9. Based on the very preliminary results of TEA and the residual value appraisal systems in R-1, it does not appear that TEA advertised rates have resulted in decreased numbers of bidders.

c. Question: What conclusions can you draw from preliminary test results in Region 1?

Answer: A statistically valid comparison and evaluation cannot be made based on the limited sample measured to date.

d. Question: What are the difficulties of using this methodology nationwide?

Answer: Difficulties of using this TEA nationwide include: 1) Developing a list of reliable variable factors used to modify a TEA appraisal to fit each unique timber sale. 2) Developing a system sensitive to accomodate the highly variable timber stands in western Washington and Oregon and in California. 3) Western forest industry resistance to a new, unfamiliar method.

The coastal and transition forests of Western California, Oregon, and Washington contain a substantially different mix of size and age classes of tree species than what occurs in the reaminder of the National Forests. These sizes range from trees 300 feet in height with a diameter of 5-6 feet, to second growth commercial stands of 60-120 feet in height with a diameter of 6-24 inches.

Lumber recovery and grade recovery vary substantially within these ranges. Defect also varies substantially between species, age, and size classes. These factors directly affect end product value, logging costs, and manufacturing costs which represents important factors in appraising timber.

A TEA system must provide discriminate response to these highly variable timber stands.

e. Question: What do you estimate to be the differences in revenues possible from using TEA nationwide?

Answer: We estimate that there would be little change in the revenues, over the long run. Bidding in a competitive market will set the market rate, regardless of the appraisal method used. TEA will not work in major areas of limited competition, and you cannot apply TEA rates derived in an area of intense competition to areas of no competition. Lack of competition is a reflection of market conditions, except in cases of monopoly.

Road Construction

24. The Explanatory Notes for the FY 1986 Budget Request state that Forest Road Program financed construction will be directed at those areas that provide access into new areas to sustain out-year timber volumes at the 10.7 billion board feet level.

a. Question: Upon what economic assumptions are out-year timber sale levels projected?

Answer: Housing start assumptions are the key economic assumption consistently used to project out-year harvest levels. Other factors, such as maintaining a balanced sales program with a Forest/Region, community stability, administration and Congressional direction, may also influence out-year projections.

b. Question: For what year's timber supply needs are FY 1986 road construction needs determined?

Answer: The Forest Road Program for the FY 1986 Budget Request includes funding for both construction and reconstruction rather than access into new areas. For the purposes of budget planning for the current year, road construction and reconstruction, are not separate for the amount of timber to be offered in the future years.

As shown in the chart, "Breakdown of FY 1985 FRP Funds By Benefitting Years", on page 256 of the FY 1986 Budget Explantory Notes, 73 percent of the Forest Road Program funds expended were in support of outputs in FY 1986 and beyond. The percentage proposed for expenditure in FY 1986 would be approximately the same to support the FY 1987 and beyond program levels. This lead time is necessary to enable the survey, design and estimating of work prior to actual construction contracting.

Trail Maintenance Contracts

25. Question: I understand the Forest Service has entered into contracts with the Washington State Interagency Committee for Outdoor Recreation to use state off-road vehicle (ORV) funds to build and maintain ORV recreation opportunities. I also understand these contracts require the Forest Service to replace, from its own funds, trails or other facilities closed for whatever purpose. The replacement requirement appears to exist in perpetuity.

a. Question: Is this perception accurate?

Answer: The perception is inaccurate. The "contracts" referred to is a Memorandum of Understanding (MOU) between the Forest Service and the Washington State Interagency Committee for Outdoor Recreation. An MOU is a coordinating document that prescribes how the parties will attempt to address a given situation, within their existing authorities to manage programs such as the Forest Roads and Trails program. The MOU can not be used to obligate monies and is thus not a contract.

b. Question: Under what authority did the Forest Service enter into these agreements?

Answer: The authority under which the Forest Service enters into these agreements is 36, Code of Federal Regulations, Section 212.5 --Cooperative Work. The MOU may be terminated by either party with a 60-day written notice.

c. Question: Is this a major land use commitment requiring preparation of an Environmental Assessment? If so, was an Environmental Assessment prepared prior to execution of the contracts?

Answer: The MOU is not a land use commitment. The MOU applies ony to maintenance - reconstruction of areas or trails where off-road vehicle use has been established by an off-road vehicle plan. Routine maintenance of existing facilities excluded from from the requirement for preparation of an environmental assessment.

Costs of Implementing Wilderness Legislation

26. Question: Please estimate the cost of implementing wilderness legislation passed by Congress during the 98th Congress. Does the FY 1986 Budget Request account for these costs? Out of what budget item will funding for implementation of wilderness legsilation come?

Answer: The total estimated cost of implementing the new legislation over a period of years is 8.4 million dollars broken down as follows:

| | | |
|---|---|---|
| 1) | Prepare legal maps and boundary descriptions | $ 1,200,000 |
| 2) | Mark boundaries on the ground | $ 1,000,000 |
| 3) | Close and sign roads and trails where motorized equipment was previously permitted | $ 1,200,000 |
| 4) | Public education and law enforcement of new regulations | $ 1,000,000 |
| 5) | Train new wilderness managers and technicians | $ 2,000,000 |
| 6) | Prepare wilderness prescriptions and monitor protection of the wilderness character | $ 2,000,000 |
| | Total | $ 8,400,000 |

The estimated cost for FY 1986 is $2.5 million dollars. This funding need has been incorporated into our FY 1986 requests for the Wilderness Management and Trail Maintenance budget line items.

### Mt. St. Helens National Volcanic Monument

27. I understand that a 300% increase in visitation is expected at the Mt. St. Helens National Volcanic Monument as a result of the 1986 Vancouver, B.C. World's Fair.

a. Question: Is this understanding correct? If so, or nearly so, what activities has the Forest Service planned to accommodate increased visitation?

Answer: A 300% increase in visitation is the latest estimate by the staff of the Gifford Pinchot National Forest. Construction of the Mt. St. Helens Visitor Center, funded in FY 1985, is scheduled for completion in FY 1986 and will offer information and interpretation facilities to 6,000 visitors a day. Also, new and reconstructed campgrounds, interpretive and picnic facilities, and trails funded in FY 1985 will be available.

b. Question: Please inform me of the needs for general operation and maintenance of visitor facilities, administrative facilities, operation of the Emergency Coordination Center for Volcanic Hazards, and naturalist programs for the Mt. St. Helens NVM for FY 1986.

Answer: It is estimated that total general operation and maintenance needs for the Mt. St. Helens NVM in FY 1986 are $2,308,000. This includes general operation and maintenance of visitor facilities, administrative facilities, operation of the Emergency Coordination Center for Volcanic Hazards, and naturalist programs.

c. Question: Please inform me of the cost of widening and paving FS Road 99 from Road 25 to the Windy Ridge Parking facility? Is this a high priority project for road construction within the Mt. St. Helens NVM? If not, what are road construction priorities for the area?

Answer: The cost of widening and paving FS Road 99 from Road 25 to the Windy Ridge parking area is estimated at $9,000,000. Every effort has been made to reduce low priority construction expenditures in the FY 1986 Budget. Road construction funding in FY 1986 is reduced by over $39 million from the level appropriated in FY 1985 and does not include the Windy Ridge Parking access project because it is a lower priority project.

## Fish and Wildlife Habitat

28. Question: I understand the Forest Service has developed a habitat opportunities program for anadromous fish, in coordination with the States. Please describe in detail the potential opportunities for improved habitat on the National Forest.

Answer: In developing the 1985 RPA Program which cover the years 1986-2030 in its planning period, the Forest Service looked at investment opportunities in many program areas including anadromous fish habitat.

The Draft Environmental Impact Statement for the 1985 RPA Program describes nine options which varies from a reduction in production to 104 million pounds of fish throughout the planning period to an increased level of 195 million pounds by the year 2030.

The final program is now being reviewed by the Office of Management and Budget. When this review is completed, more information will be available on the habitat opportunities mentioned above.

The FY 1986 budget does not propose any major initiatives to increase anadromous fish habitat although adequate mitigation work is funded to ensure that the timber program does not diminish populations.

## Personnel Reductions

29. Question: On February 23, 1985, a Forest Service spokesman was reported as saying passage of the Timber Contract Modification Act will result in a reduction of an estimated 700 to 1,000 Forest Service personnel in Region 6 by December 31, 1985. Is this an accurate statement? Is this reduction of personnel reflected in the FY 1986 Budget Request? If not, is it reflected in the FY 1985 Budget Request?

Answer: A substantial portion of the timber sale program for Region 6 in FY 86 will be made up of volume returned under the Federal Timber Contract Payment Modification Act, 2 billion board feet of the 4.6 billion board foot program. Much of this volume will have roads already in place, eliminating the need for engineering survey, design and construction supervision. Also, little rework will be required in the way of timber sale preparation, such as marking and cruising. The best sales, requiring the least amount of work, will be reoffered first, in order to initiate an early, uniform return of this volume to the market.

We are expecting a reduction of 700 and more in the number of Forest Service personnel needed to meet the timber sale program targets in FY 86 in Region 6. This is reflected in our FY 86 Budget Request. As older timber sales--those requiring more work to refurbish in order to resell--are included in the resell target, the level of budget savings will decrease.

## Payments to States

30. Question: The FY 1986 Budget Request reflects a reduction of $194,957,000 from FY 1985. The FY 1986 request assumes passage of proposed legislation that would change the program basis from receipts sharing to anet receipt basis. I understand that, within certain limits, the Forest Service Payments to States and Counties offset other payments under the Payments-In-Lieu-of-Taxes program.

a. Question: Please inform me of the amounts paid to each state under both programs.

Answer: The following table is a display of 1984 PILT payments, the 25% Payments to States and the Payments to Counties, National Grasslands.

b. Question: To what extent do payments to states and counties offset PILT payments?

Answer: 31 U.S.C. 6901-6907, provides for payments in lieu of taxes to counties and other units of general local governments for lands administered by BLM, the Forest Service, the National Park Service, and certain other agencies.

Provision is made for payment of 75 cents per acre, reduced by payments made under certain public land programs such as the Mineral Leasing Act and the National Forest Revenue Act, or 10 cents per acres, whichever is greater. However, payments may not exceed a statutory ceiling based on population.

Additional payments are specified for lands acquired after December 31, 1970, for the Redwood National Park and the national park and national wilderness systems.

c. Question: Do the projected savings under proposed legislation take into account the offset of PILT payments?

Answer: We are currently evaluating the impact of the net receipts proposal on the PILT payments. This evaluation will be completed prior to the submission of legislation.

| | 1984 | | |
|---|---|---|---|
| | PILT | Forest Service 1/ 25% Payments to States | Forest Service 1/ Payments to States National Grasslands |
| | (Dollars in thousands) | | |
| ALABAMA | $ 116 | $ 1,894 | $ -- |
| ALASKA | 3,197 | 1,052 | -- |
| ARIZONA | 8,708 | 5,153 | -- |
| ARKANSAS | 1,665 | 5,783 | 1 |
| CALIFORNIA | 11,733 | 44,114 | -- |
| COLORADO | 7,643 | 2,277 | 207 |
| CONNECTICUT | 19 | -- | -- |
| DELAWARE | 4 | -- | -- |

| | 1984 | | |
|---|---|---|---|
| | PILT | Forest Service 25% Payments to States [1] | Forest Service Payments to States National Grasslands [1] |
| | (Dollars in thousands) | | |
| DISTRICT OF COLUMBIA | 6 | -- | -- |
| FLORIDA | 1,371 | 2,479 | 82 |
| GEORGIA | 785 | 883 | -- |
| GUAM | 1 | -- | -- |
| HAWAII | 10 | -- | -- |
| IDAHO | 7,596 | 8,647 | 3 |
| KANSAS | -- | -- | 20 |
| ILLINOIS | 245 | 109 | -- |
| INDIANA | 264 | 146 | -- |
| IOWA | 123 | -- | -- |
| KANSAS | 362 | -- | -- |
| KENTUCKY | 650 | 321 | -- |
| LOUISIANA | 180 | 4,672 | -- |
| MAINE | 47 | 22 | -- |
| MARYLAND | 54 | -- | 4 |
| MASSACHUSETTS | 72 | -- | -- |
| MICHIGAN | 1,276 | 1,213 | 343 |
| MINNESOTA | 975 | 863 | -- |
| MISSISSIPPI | 387 | 6,502 | -- |
| MISSOURI | 1,020 | 1,436 | -- |
| MONTANA | 8,505 | 7,845 | -- |
| NEBRASKA | 275 | 37 | 33 |
| NEVADA | 5,528 | 296 | -- |
| NEW HAMPSHIRE | 287 | 333 | -- |
| NEW JERSEY | 50 | -- | -- |
| NEW MEXICO | 10,071 | 1,829 | 17 |
| NEW YORK | 170 | 5 | 2 |
| NORTH CAROLINA | 1,206 | 846 | -- |
| NORTH DAKOTA | 534 | -- | 7,868 |
| OHIO | 306 | 156 | 1 |
| OKLAHOMA | 940 | 775 | 408 |
| OREGON | 2,728 | 86,544 | 20 |
| PENNSYLVANIA | 261 | 1,958 | 6 |
| PUERTO RICO | 8 | 10 | -- |
| SOUTH CAROLINA | 121 | 2,665 | 186 |
| SOUTH DAKOTA | 1,693 | 946 | -- |
| TENNESSEE | 461 | 532 | -- |
| TEXAS | 930 | 3,868 | 70 |
| UTAH | 8,750 | 767 | -- |
| VERMONT | 110 | 120 | -- |
| VIRGIN ISLANDS | 21 | -- | -- |
| VIRGINIA | 1,141 | 491 | -- |
| WASHINGTON | 3,001 | 25,443 | -- |
| WEST VIRGINIA | 786 | 326 | 3 |
| WISCONSIN | 538 | 728 | -- |
| WYOMING | 7,706 | 851 | 772 |
| TOTAL | $ 104,637 | $ 224,937 | $ 10,047 |

[1] Based upon 1983 timber receipts and grassland receipts.

(Columns may not add due to rounding)

## Recreation User Fees

31. Question: Your Budget request suggests passage of legislation to impose recreation user fees for the use of National Forest System lands. How do you propose to collect these fees? Do you propose using the receipts from recreation user fees to maintain and improve trails and other recreation facilities? What would your position be if legislation to allow for collection of fees imposed such a requirement?

Answer: Legislation for additional authority would be required to allow us to collect the dollars shown in our budget request. We are currently workfing with OMB in determining what type of fee will be incorporated in a legislative proposal. A primary consideration in developing a proposal is that implementation is practical, economical and fair. It is anticipated that any fee would be collected directly from the user in a manner that is convenient to the user and returned to the Forest Service for operation, maintainence and improvement of the recreation resource. We support the concept of returning the fee to the collecting agency to be used for recreation purposes.

## FS/BLM Interchange

32. Question: Please describe in detail the efficiencies possible by transferring Public Domain Lands administered by the Bureau of Land Management to the National Forest System. How were these figures arrived at?

Answer: The major savings result from the merger of the BLM Resource Area Offices and the FS District Offices managing adjacent or interspersed lands, and from the merger of the BLM District Offices and National Forest Supervisor's Offices supporting these field units. Some savings in FS Regional Office and the BLM State Office personnel would also occur, as would savings from the realignment of minerals functions and personnel.

Savings are related to reduced salary and employee benefits, reduced office and other space needs, elimination of job-related travel for positions saved, and reductions in support equipment.

Costs primarily involve transfer of personnel, office lease and rental adjustments, severance costs, employee retirement costs, and miscellaneious costs, including resigning of offices and lands, adjustment to computer and data networks, and similar one-time administrative costs.

## QUESTIONS SUBMITTED BY SENATOR JOHNSTON

## Forest Service/Bureau of Land Management Interchange

33. Question: What are the specific FY 1986 budget implications of the proposed interchange for each Agency? What about FY 1987-89?

Answer: The Forest Service FY 1986 budget request $64,185,000 for this purpose: $14,400,000 for FS/BLM Interchange and $49,785,000 to administer Oregon and California Grant Lands. The Bureau of Land Management has $1,800,000 in their FY 1986 budget request for the FS/BLM Interchange.

The preliminary estimate of implementation costs for the period FY 1986 through FY 1989 is in the range of $35 - $45 million. Specific estimates for FY 1987 and 1988 have not yet been developed. Budget implications for 1987 and 1988 will be available during June/July 1985, when field offices complete their Implementation Guides.

34. The Administration has proposed Appropriations language in the Forest Service budget "for expenses necessary to implement Forest Service/BLM jurisdictional boundary changes and for the administration of Oregon and California Grant Lands..."

Question: What is the purpose of such language in advance of any statutory authority to make the land exchange? Do you interpret this Appropriations language as giving you any additional authority to carry out the proposed exchange?

Answer: The purpose of the proposed appropriations language was to permit the practical and logical administrative actions which could be taken within existing authorities to enhance public service, improve management efficiency, and save money while still maintaining the viability of affected offices. The proposed language would also permit implementation actions following enactment of legislation.

The President's Budget assumes that legislation to implement the interchange will be passed during FY 1986. Interim steps to achieve management efficiency and save money, pending legislation, would be taken in the context of present legal authorities. The steps taken will not be irrevocable. Costs associated with the actions to be taken in advance of legislation are to cover such things as managing the Oregon and California Grant Lands, colocating some offices, and relocating some employees.

35.

a. Question: Have you conducted any public meetings or hearings in the West concerning the interchange?

Answer: The Forest Service and Bureau of Land Management are currently planning an extensive round of public meetings in the areas affected by the interchange. See our response to question #6 for a schedule of meetings.

b. Question: What has been the general reaction to the proposal?

Answer: Only a few public meetings have been conducted to date. From these meetings and from what we heard from informal sources and discussions with interest groups, there seems to be general support for the proposal.

c. Question: Have you had any specific comments from the mining industry regarding the proposal to shift BLM's responsibility for mining and mineral leasing activities on Forest Service lands to the Forest Service?

Answer: We have had a mix of reactions from the mining industry. Some have taken a wait and see attitude, awaiting development of more specific data in the implementation guides. Others oppose the proposal based on their perception of a more open attitude to mining by BLM and a fear that the 1872 Mining Law might be somehow altered.

## Forest Service/Deficit Timber Sales

36. Question: In response to a June 1984 GAO report, the Forest Service indicated that it was "about ready" to implement a new tracking and reporting system to track timber sale activities and costs. Has this system been implemented? If not, when will it be operational?

Answer: The Sales Tracking and Reporting System (STARS) will track timber sale project status from initial proposal through purchase. The STARS provides descriptive information and status of preparation on individual timber sales. The file for each sale is updated with new or revised information at each of six standard steps of the timber sale preparation process. This system will not track costs of individual timber sales.

Pilot testing of a basic system will begin in March 1985 on sample Ranger Districts in each Region. Implementation of the basic system will begin October 1, 1985, with completion a year later. Full integration with the National Land Information System by January 1, 1987, will facilitate rapid, concise reporting.

Further enhancement of STARS will provide interface with the Service-wide Timber Statement of Account (STSA) by July 1, 1986. STSA fullfills the financial requirements of timber sale contract administration. This includes charging for forest products purchased and removed. It provides the capability to compare advertised (cruised) volume and bid price with actual harvest volume and price paid.

Development of a cost-accounting system for a forest-land timber sale program that was directed by Congress will be in place in 1986. This will provide the data that will permit comparing Forest costs and revenues for the timber sale program.

## Forest Service/Mineral Receipts

37. Chief Peterson indicates in his statement that the budget for the minerals program was increased 8 percent over 1985 levels in recognition of "the high rate of receipts generated by this program."

a. Question: Was this the primary test used to determine which Forest Service programs should be increased and which should be cut?

Answer: No. The minerals program was increased over 1985 levels in response to the needs associated with projected work activities, resource coordination, and protection of surface resources.

b. Question: How did you determine that mineral receipts were generated in excess of costs for the Forest Service minerals program?

Answer: The comparison used was between the total minerals program budget and estimated returns to the Federal government (mineral receipts) from mineral activities on National Forest System (NFS) lands. These receipts include those reported by the Department of the Interior for public domain minerals within the NFS and those reported by the Forest Service's National Forest Fund for other minerals within the NFS.

Forest Service/Recreation Fees

38. Question: Is the Forest Service contemplating the imposition of entrance or admission fees to Forest System units as part of its recreation fee package?

Answer: We are exploring several alternative ways of closing the gap between recreation costs and revenue. We believe persons who directly utilize the recreation resources of the National Forests should pay an appropriate share of the costs of providing and maintaining those recreation opportunitiels. We see these as a general use fee, based on a recreation use of the forest, rather than an admission fee to the forest. We anticipate consideration of this issue by the President's Commission on Outdoor Recreation Resources Review.

Grizzly Bear

39. Question: In your budget justification documents, you state that the "survival and recovery of the grizzly bear depends on the management of National Forest System lands." At the same time, the budget recommendation for endangered, threatened, and sensitive species is reduced by 45 percent. Is there enough money in your budget proposal to protect the grizzly and other endangered species of National Forest System lands?

Answer: A high priority in the Forest Service Endangered Species Program is to manage the grizzly bear and its habitat to provide for recovery. The level of funding provides for basic habitat protection for all endangered, threatened and sensitive species.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

Wilderness Management

40. The Forest Service budget for wilderness management reflects a small decrease in funding; however, over 160 new wilderness areas were created by the 98th Congress which will require increased administration. In Arkansas over 91,000 acres were added to the National Wilderness Preservation System making it the largest state of acreage in the East.

a. Question: What kind of management can the public expect for these newly created wilderness areas? Will funds be available for marking and signing wilderness boundaries, enforcement of wilderness regulations, and mapping for ease of public location and access?

Answer: Yes, funds will be available for starting on these tasks. Priorities will be set to complete mapping and to sign wilderness boundaries where motorized trespass is most likely. Enforcement of regulations will be increased as the need arises. The increased administrative costs of these areas will be spread over the next few years.

b. Question: Won't funds for the management of previously designated wilderness areas be seriously reduced in order to spread fewer funds further?

Answer: Funds for the entire job of wilderness management for both existing and new areas will be prioritized to work on the most important jobs first.

## State and Private Forestry

41. The S&PF budget reflects a 50% reduction from the previous year. It appears that at some point this program will become ineffective in accomplishing its important goals of assisting in the management and protection of non-Federal lands. I suspect that this program is nearing that point now. I am alarmed by the drastic reduction in the pest management and fire protection programs.

a. Question: Have you determined that integrated pest management is no longer an effective way of managing pesticides on National Forest lands?

Answer: Integrated pest management is still an effective way of managing pests on National Forest lands and the Forest Service strongly advocates its use. However, the need to reduce Federal spending dictates that the least expensive methods be used. The least cost methods often are conventional pesticides and mechanical treatments both of which are tactics within integrated pest management.

b. Question: The Ozark National Forest DEIS and proposed management plan indicates the use of integrated pest management techniques in the use of pesticides. Will this plan be changed to reflect the decision to concentrate on conventional pesticides and mechanical treatment?

Answer: The Ozark National Forest DEIS will not be changed. Integrated pest management includes, but is not limited to, conventional pesticides and mechanical treatment. Integrated pest management is the preferred method for dealing with pest problems.

c. Question: Will all cost sharing funds for fire protection on non-Federal lands be eliminated?

Answer: Yes, there are no other sources of Federal funding for fire protection on non-Federal wildlands. The one exception would be the potential funding of emergency situations through the Federal Emergency Management Agency (FEMA) Fire Suppression Assistance Program authorized by Section 417 of Public Law 93-288.

d. Question: What effect will this reduction in fire protection cost sharing have on adjacent Federal lands?

Answer: This year, program funds are targeted to (1) identify the efficient fire program for each State and (2) provide technical assistance that will improve the efficiency of State fire organizations. Greater reliance will be placed on local units to fulfill their fire protection responsibilites associated with these wildlands.

## COOPERATIVE LAW ENFORCEMENT

42. I understand that in 1984, 359 coop-law enforcement agreements were in effect throughout the National Forest System. These agreements provided reimbursement to State and local law enforcement agencies for services provided beyond their normal range of responsibilities. These services include the increased presence of officers in an attempt to deter crimes against forest users and their property. They also include backup assistance to the Forest Service officials in emergency situations.

a. Question: Won't the elimination of the entire coup-law enforcement program ($7.3 million) jeopardize the safety of the public in general and Forest Service personnel in the performance of their official duties? Explain.

Answer: It is not possible to forecase the precise effects. Some local law enforcement agencies will probably use their own funds or other Federal resources such as Payments in Lieu of Taxes-to maintain the same level of enforcement activity. In most cases there probably will be some diminution. However, most local governments give a high priority to law enforcement and there are numerous local agencies that do not receive cooperative law enforcement funds yet have adequately enforced their laws on the national forests.

b. Question: How does the elimination of this program effect the numerous small law enforcement entities scattered throughout the country who are dependent on these additional funds?

Answer: Elimination of this program will require that these small departments be partially financed from other sources of revenue, and/or that their presence on the National Forests to deter and investigate crimes will be reduced in accordance with local priorities. Enforcement of State and local laws on national forests is a State and local responsibility.

## JOB CORPS CENTERS

43. Of the 18 Job Corps Centers in the Nation the Forest Service operates two of the best, Cass and Ouachita, in the state of Arkansas. Each of these centers has shared honors in being named the number one center in the Nation during the last two years. The primary purpose of the Job Corps Center is to produce graduates who are able to find productive work, reenter school, or join the military. This program has been extremely successful in Arkansas and, as I understand it, throughout the Nation. In your budget request you have indicated that the Forest Service is not proposing a Job Corps Program for FY 1986.

a. Question: Why is a Job Corps program not proposed for FY 1986?

Answer: The President's Budget information for fiscal year 1986 reflects the decision to terminate operation of the Job Corps program by the end of the program year, June 30, 1986. The residential training program which averages over $15,000 per year, per slot can no longer be justified in the light of the relatively low program completion, job placement rates, and high cost.

b. Question: How will current personnel and facilities be handled with the elimination of the program?

Answer: Some of the Job Corps personnel will be placed in other jobs within the Forest Service where feasible. The remaining personnel will be subjected to a reduction-in-force (RIF) process.

Currently the Forest Service would have no further use for the 18 Job Corps Facilities. According to past experience, some of the facilities would probably be utilized by prisons and school systems.

c. Question: How will a one or two year cancellation of the program effect it's long term operation?

1. Maintenance and security of the 18 existing idle job corps faciltiies will cost aprpoximately $2.7 million annually until buildings are dismantled, leased and/or sold.

2. Upon start up, vocational offerings might be limited due to renegotiation of union contracts with various trade unions.

3. Rehiring of job corps staff at all levels would be necessary.

QUESTION SUBMITTED BY SENATOR BINGAMAN

Forest Service/Bureau of Land Management Interchange

44. Question: Secretary Hodel indicated that potential savings from this interchange would be minimal the first year and would be spread over many years. It appears your budget reflects greater savings for this year. Could you explain your determination of savings for this year?

Answer: Potential savings will be minimal during FY 1986. Savings are related to reduced salary and employee benefits, reduced office and other space needs, elimination of job-related travel for positions saved, and reductions in support equipment. Fewer employees will be needed to manage those federal lands after the interchange is completed. We estimate that saved positions will be in the range of 700 - 1,000. Initially, however, all current staffing will be required to complete and orderly transition that does not disrupt service to the public. Some savings will occur during FY 1985 through 1988. FY 1989 would be the first year that the full savings would be realized and minor or no implementation costs incurred. At the end of the 10-year period 1986-1995, $200-$300 million in total savings will have resulted from the proposed interchange.

# APPENDIX III

## RESPONSES FROM CHAIRMAN O'CONNOR TO ADDITIONAL COMMITTEE QUESTIONS

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FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

March 8, 1985

Honorable James A. McClure
Chairman
Committee on Energy and
Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Enclosed are my responses to questions submitted for the record in conjunction with my testimony before the Committee on Energy and Natural Resources on March 1, 1985.

I would like to emphasize that, if the Commission does not receive the pay raise supplemental request for FY 1985 included in the President's budget and if the Commission decides to go forward on the staff's cluster impact assessment proposal, we will have no alternative but to hold back on hiring. This in turn would seriously affect our ability to process hydropower license applications not associated with the cluster impact assessment studies, and to achieve the productivity goals and workload reductions that we are projecting for both FY 1985 and 1986 for most of FERC's programs.

If I may be of further assistance, please let me know.

Sincerely,

Raymond J. O'Connor

Raymond J. O'Connor
Chairman

Enclosures

Answers to Questions Submitted to

The Honorable Raymond J. O'Connor
Chairman, Federal Energy Regulatory Commission

from the

Committee on Energy and Natural Resources

March 1, 1985

Questions 1 - 9, Submitted by the Majority
Question 10, Submitted by Senator Domenici
Questions 11 - 15, Submitted by Senator Evans
Questions 16 - 18, Submitted by Senator Johnston
Question 19, Submitted by Senator Bumpers
Questions 20 - 22, Submitted by Senator Bingaman

## QUESTIONS FOR THE RECORD FROM SENATOR McCLURE

### Cluster Impact Assessment Procedure

Question 1a: If the Commission decides to implement the proposed cluster impact assessment procedure in the Owens, Snohomish and Salmon River Basins, are there sufficient funds in the FY 1985 appropriation to undertake these assessments immediately?

Answer 1a: We will be able to fund the proposed cluster impact assessment procedure for the three river basins. However, without the pay raise supplemental of $1.6 million, our ability to process hydropower license applications not associated with the cluster impact assessment studies and to achieve the productivity goals and workload reductions that we are projecting for both FY 1985 and FY 1986 across most of FERC's programs would be seriously affected.

Question 1b: In your oral testimony to the Committee, you indicated that the cost of undertaking cluster impact assessments in the 19 other basins identified in the cluster impact assessment procedure Notice is in the range of $8 to $10 million. You did not include in your FY 1986 budget a request for these funds. When will you request the necessary funds?

Answer 1b: Under our current schedule, I anticipate that funds for these 19 other river basins will be included either as a supplemental request for FY 1986 or in our FY 1987 budget request. The exact amount of funds we will need is contingent upon (1) the final form of the cluster impact assessment procedure (CIAP) and (2) Commission determination of the extent of adverse environmental impact in each of these 19 river basins.

Question: Will the cluster impact assessments in these 19 basins, and hence development in these basins, wait until funds become available?

Answer: If these 19 basins require cluster impact assessments, some projects would be delayed until funds become available.

In the initial phase of cluster impact assessments Commission staff will perform geographical and resource sorts to determine if all projects do, in fact, belong in the cluster. For projects remaining in the cluster, it may be possible to use internal staff to perform advance environmental work on the less complicated or smaller projects. In this way we would be able to make progress on the project licenses until the FERC would receive funding to support the appropriate level of environmental review. For those not requiring a cluster study, the Commission will proceed as expeditiously as possible on those license applications that do not have an adverse impact on the environment.

Question: If so, when do you expect these funds to become available?

Answer: At the earliest, it would be in FY 1986, depending of course, on the outcome of any supplemental request for funding.

Question 1c: For what river basins, other than those identified in the cluster impact assessment procedure Notice, has there been a request for a cluster or cumulative impact assessment?

Answer: To clarify my statement in the hearing on this subject, prior to the January 18, 1985, Notice for Public Comment, a review of the Commission files indicates that Federal or state resource agencies requested cumulative impact assessments for the following 11 river basins:

1. Upper Mississippi - MN, WI, IA, IL, MO,
2. Arkansas - AR, OK, KS
3. Monongahela - WV, PA
4. Allegheny - PA, NY
5. Merrimack - NH, MA
6. Connecticut - MA, CT, VT, NH
7. Muskingum - OH
8. Penobscot - ME
9. Flathead - MT
10. Mono - CA
11. Walker - CA

The FERC has made no determination as to whether the CIAP would apply to these river basins.

The Commission's staff is currently reviewing its files as well as comments received in response to its January 18 CIAP Notice in order to provide the Committee with a more comprehensive list of those river basins for which cumulative impact assessments have been suggested by parties other than Federal or state resource agencies. This information will be submitted for the record in the near future.

Question 1d: On page 46 of your FY 1986 budget request you indicate that the Commission is requesting $2.65 million to fund environmental analyses to be performed under contract by DOE national laboratories. Am I correct in my assumption that any national laboratory that has the necessary expertise will have an opportunity to seek this work?

Answer: Yes, as long as the lab has the level of expertise needed to perform these environmental analyses and no conflict of interest exists.

**FEDERAL ENERGY REGULATORY COMMISSION**
**WASHINGTON, D.C. 20426**

APR 1 1985

Honorable James A. McClure
Chairman
Committee on Energy and
Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

By letter dated March 8, 1985, I submitted my responses to questions for the record in conjunction with my March 1 budget testimony before the Senate Committee on Energy and Natural Resources. At that time I agreed to provide you with a more comprehensive list of river basins for which cumulative impact assessments have been suggested.

In addition to the 22 river basins identified in the Cluster Impact Assessment Procedure proposal and the 11 others cited in my March 8 response, a review of the Commission's files has identified a total of 21 river basins with pending license or exemption applications for which there has been a request for a cluster or cumulative impact assessment. The listing is as follows:

Black - NY
Moose - NY
Henry's Fork - ID
Schuylkill - PA
Lehigh - PA
Beaver - PA
Consumnes - CA
Middle Fork American - CA
North Fork American - CA
Yuba - CA
Pit - CA
Kern - CA
Kings - CA
Merced - CA
Ohio - KY
Kentucky - KY
Green - KY
Susquehanna - MD, PA, NY
Spokane - WA
Upper Klamath - OR
White - WA

It is not expected that the complete Cluster Impact Assessment Procedure, or any phase thereof, would be conducted in all of those identified. All of the basins listed above have a pending application for license or exemption. Some of the projects identified in the request would not interact in a cumulative fashion. Projects within these non-cumulative impact basins would be evaluated and a licensing decision would be made on their individual merits.

If I may be of further assistance, please let me know.

Sincerely,

Raymond J. O'Connor

Raymond J. O'Connor
Chairman

Question 2: If the Commission decides to use the cluster impact approach in assessing proposed hydro projects, I assume that the result would be that no projects in a cluster area will be built, because the cumulative impact review would consume so much time that the projects could not be completed by the deadline for favorable tax treatment, which is January 1, 1989. Am I correct in that assumption?

Answer 2: It is not possible to determine the correctness of your assumption prior to implementation of a cluster impact assessment procedure (CIAP), because of the many uncertainties associated with such a procedure. These uncertainties include not only the administration of the CIAP by the Commission and its staff, but also matters under the control of applicants themselves, such as timely responses during the application and licensing process, availability of financial resources, and uncertain legal interpretations of the energy investment tax credit deadlines. Finally, it is uncertain at this time whether or not the Commission will adopt the cluster impact approach proposed by staff in its current form or in part or not at all.

If, for the purposes of this question, it is assumed the Commission adopts the staff-proposed CIAP without major change as described in the January 18, 1985, Federal Register notice issued in Docket No. EL85-19-000, then that procedure would involve four sequential steps: the Geographic Sort, the Resource Sort, the Multiple Project Assessment, and the NEPA document phase. Projects initially included in a CIAP area may drop out of the procedure at the conclusion of any of the three intermediate steps. For example, a project determined during the Geographic Sort to be isolated from the rest of the cluster would be excluded from further processing under CIAP--and eligible for case-by-case processing by the Commission--at the close of the 78-day Geographic Sort phase. Similarly, a project determined during the Resource Sort to have no impact on any target resources would be eligible for case-by-case processing at the close of the 162-day Resource Sort phase.

Even projects remaining in the CIAP for the maximum period of time--the 519 days estimated to complete a cumulative environmental impact statement--are not thereby foreclosed. If the proposed CIAP were initiated in a cluster area by May 1 of this year, projects in the cluster area which remained in the CIAP until its conclusion would be eligible for Commission approval by early October 1986. Thus, assuming that the Windfall Profits Tax Act requires qualifying hydroelectric generating property to be placed in service before January 1, 1989, developers of such projects would have 27 months to complete construction.

However, it is not completely clear under the Windfall Profits Tax Act that in order for qualifying hydroelectric generating property to be eligible for the additional 11% energy investment tax credit it must be placed in service before January 1, 1989. Hydroelectric generating property is declared eligible for the tax credit at least through December 31, 1988, by 28 U.S.C. § 46(a)(2)(C)(iv) "if docketed by the Federal Energy Regulatory Commission before January 1, 1986..." It has been argued that eligibility for tax credits extends beyond December 31, 1988, by the more general definition of the "qualified investment" on which the tax credit is based, which is limited only by 26 U.S.C. § 46(c)(i) to property "placed in service by the taxpayer during...[the] ...taxable year..." To our knowledge, IRS has not ruled on this issue.

Question 3: If using the cluster impact approach would guarantee that all of the proposed projects in a cluster area will not be built, wouldn't that fact require the Commission to go back to the drawing board and come up with a new approach that would permit at least some development to occur?

Answer 3: As indicated in the answer to the previous question, implementation of the proposed CIAP in a cluster area would not preclude any proposal for hydroelectric development in the cluster. As pointed out in the answer to Question 6, below, the Commission does have flexibility to act on an individual project fully covered by a separate environmental impact statement.

Question 4: If using the cluster impact approach would guarantee that all of the projects in a cluster area will not be built, wouldn't it be appropriate, in that circumstance, for the Commission to exercise its discretion to engage in a new balancing process along the lines contemplated by the courts? For example, the U.S. Court of Appeals for the D.C. Circuit recently held:

> How far in time and space a power projection investigation ought to extend is a question involving practical considerations of feasibility and a balancing of costs against expected useful results. Resolving these issues requires technical expertise and is properly left to the informed discretion of the responsible federal agency. Friends Of The River v. FERC (D.C. Cir. 1983).

It seems to me that a cluster impact approach would be considered infeasible if it guarantees that no new licenses will be issued and no development will occur in a cluster area in a river basin. Wouldn't that assumption be strengthened considerably if it can be shown that approval of only one pending project in the cluster area would be environmentally acceptable?

Answer 4: As was explained in the answer to Question 2, implementation of the proposed cumulative impact assessment procedure (CIAP) in a cluster area would not necessarily preclude any proposal for hydroelectric development in the cluster. In the above-quoted portion of Friends Of The River v. FERC, 720 F.2d 93 (D.C. Cir. 1983), the court was addressing the Commission's discretion to delineate the scope of the required need-for-power inquiry pursuant to the comprehensive development standard of Section 10(a) of the Federal Power Act. Thus, the balancing process referred to by the court does not pertain to the decision of whether to prepare an environmental impact statement under NEPA. However, the court's discussion is applicable by analogy to the manner in which the Commission chooses to fulfill its NEPA responsibilities.

Question 5: If NEPA requires you to use the cluster impact approach, why does it not also require you to employ a full, basin-wide cumulative impact assessment? How can you legally draw the line in a restricted fashion, so that only a portion of a river basin is considered?

Answer 5: While the Supreme Court in Kleppe v. Sierra Club, 427 U.S. 390 (1976), stated that the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 *et seq.*, may require a comprehensive impact analysis in certain situations where several proposed actions are pending at the same time, the Court emphasized that the geographic scope of any such analysis would be defined by the factual determinations and administrative considerations of the agency. The Court stated:

> The determination of the region, if any, with respect to which a comprehensive statement is necessary requires the weighing of a number of relevant factors, including the extent of the interrelationship among proposed actions and practical considerations of feasibility. Resolving these issues requires a high level of technical expertise and is properly left to the informed discretion of the responsible federal agencies. [427 U.S. at 412.]

Thus, for example, where all the licensing proposals in a particular river basin are grouped in one area and would have no impact on other areas in the basin, there would be no reason to conduct an impact analysis of the entire basin. Also, for example, where not all such proposals are grouped in one area but are not sufficiently interrelated to require a comprehensive statement, or are not susceptible to a comprehensive statement due to practical considerations of feasibility, the agency would have the flexibility to narrow the scope of the comprehensive statement.

Question 6: The leading case on the necessity for cumulative environmental impact statements appears to be Kleppe v. Sierra Club, decided in 1976. The Court held that NEPA did not require the Department of the Interior to prepare a comprehensive environmental impact statement on all proposed coal mining projects in the "Northern Great Plains Region." The court rejected the Sierra Club's contention that the relationships between the proposed projects were such that a comprehensive impact statement had to be prepared before specific applications could be approved.

In a footnote, the court elaborated on this point as follows:

> Nor is it necessary that petitioners always complete a comprehensive impact statement on all proposed actions in an appropriate region before approving any of the projects. * * * [A]pproval of one lease or mining plan does not commit the Secretary to approval of any others; nor, apparently, do single approvals by the other ... [Federal agencies] commit them to subsequent approvals. Thus, an agency could approve one pending project that is fully covered by an impact statement, then take into consideration the environmental effects of that existing project when preparing the comprehensive statement on the cumulative impact of the remaining proposals.

This language would appear to me to be an open invitation by the Supreme Court to abandon the cumulative impact approach and to proceed immediately with the processing of individual hydro project applications in some of these river basins. Would you agree?

Answer 6: The Supreme Court's comment in footnote 26 of Kleppe v. Sierra Club, 427 U.S. 390, 414 (1976), notes that an agency need not always complete a comprehensive environmental impact statement on all proposed projects in a region before approving any of the projects. The Court's comment was predicated on the assumption that any project acted on individually would be fully covered by a separate environmental impact statement. Moreover, the Court assumed that the agency would prepare a comprehensive statement on the remaining proposals.

It may be very expensive and time-consuming for the Commission to prepare an environmental impact statement for one or some projects located in a river basin that is the subject of a petition for cumulative analysis. The Commission staff's cluster approach may be more efficient in two ways. First, after the geographic and resource sorts for the river basin are completed, the Commission would have a record to sustain a finding that some projects are not interactive with others in that basin. These "isolated" projects could then be analyzed on an individual basis. The Commission staff would prepare an environmental assessment for these projects. If the staff's assessment finds that there would be no significant effect on the environment, the project could quickly proceed to licensing without preparation of an environmental impact statement.

Second, it may be less expensive to prepare one comprehensive environmental impact statement for a cluster of pending projects than to prepare environmental impact statements for one or some projects that would naturally fall into a cluster. Viewed in terms of the entire undertaking it may also be faster. The Commission staff's proposed cluster procedure contemplates finishing a cumulative environmental impact statement in approximately 17 months. By comparison, an environmental impact statement on a single project generally takes 12 to 15 months to complete.

In addition to these practical considerations, in Kleppe the Court held that:

> ... when several proposals for ... actions that will have cumulative or synergistic environmental impact upon a region are pending concurrently before an agency, their environmental consequences must be considered together. Only through comprehensive consideration of pending proposals can the agency evaluate different courses of action.
> [427 U.S. at 410; footnotes omitted.]

Thus, while footnote 26 indicates that an agency has some flexibility to act on an individual project fully covered by an impact statement, we do not read it as releasing the agency from its responsibility to consider a cumulative impact analysis of the remaining pending proposals. To do so would eliminate the agency's ability to evaluate different courses of action with respect to the proposals pending before it.

## Five Percent Pay Cut

7. Question: Your FY 1986 budget request assumes a five percent pay reduction for Federal employees, reducing FERC funding needs by about $3.3 million. If Congress does not enact a five percent pay cut, will your FY 1986 budget request of $95.6 million be sufficient? If not, what action will you take?

**Answer**: No, we would not have enough funds to support our required staffing level if Congress does not enact the five percent pay reduction. We would begin with a hiring freeze. All offices and programs would be affected, some more than others, depending on staffing levels at the time the hiring freeze is put into effect. The $3.3 million is equivalent to the salaries for approximately 100 staff years. To the extent that attrition would be insufficient to cover this shortfall, specific program curtailments would have to be implemented.

FERC Fee Revenue

8a. Question: Your FY 1986 budget request notes that fee collections will total about $66 million next year, of which $10 million would be derived from new annual charges to be authorized by legislation that is to be submitted by the Administration. When will the Administration submit this proposed legislation?

Answer: We expect the new annual charges legislation to be submitted to the Congress early this session pending, of course, appropriate review by the Office of Management and Budget. The proposed legislation will be similar to that currently prescribed by the Federal Power Act in which we assess hydropower licensees based on the FERC costs of implementing the Act.

8b. Question: If Congress does not enact it, and therefore the additional $10 million in fees are not generated, will your budget or operations be adversely affected?

Answer: Neither our budget nor operations would be affected in FY 1986 assuming that Congress adopts the same appropriation language used in our FY 1985 appropriations Act.

Natural Gas Pricing

9a. Question: On 1/1/85, price controls expired on roughly half of natural gas. Is there any evidence yet as to what is happening to natural gas prices as a result of partial decontrol?

Answer: The Commission's review of Purchased Gas Adjustment filings by major interstate pipelines to become effective on or after January 1, 1985, reflects a stabilization of and even decline in the purchased gas costs of most of these companies. Although some pipelines may experience increases during the latter part of 1985, this is expected to be limited to a few companies. Most major pipelines are currently in the process of attempting to renegotiate contracts; however, we are not aware of any major success to date. Many producers have, however, been willing to waive contract provisions in response to market conditions. The Commission expects to know more about the results of these contract renegotiations by this summer. The Commission expects that the market will will gradually achieve renegotiation that is responsive to competitive conditions.

9b. Question: Over the past year, what actions have the Commission taken to make the gas market more competitive and to reduce the price of gas to consumers?

Answer: The Commission reviews the purchasing practices and managerial decisions underlying pipeline PGA rate filings to evaluate the prudence of such actions under Section 4 of the Natural Gas Act and to ensure that such actions do not violate the standards prescribed by Section 601(c) of the Natural Gas Policy Act. Also, during the year, special marketing programs (SMPs) were approved for both pipelines and producers which enabled the pipelines to release their high cost gas supplies in return for take-or-pay relief and permitted those producers willing to discount their prices to market clearing levels to sell the released gas in markets previously served by pipelines and distributors. Initially, the eligible SMP markets were primarily the marginal markets that would otherwise use an alternate fuel or would only use gas at discount prices, although some gas-on-gas competition was also permitted. In its order of September 26, 1984, extending the SMPs, the Commission expanded eligible markets to include 10 percent of the contractual entitlements of firm sales customers. This expansion was intended to permit distributors to purchase lower-priced SMP gas in order to reduce Their rates to all categories of end users, including resident consumers.

Another important action taken during 1984 was the issuance of Order No. 380 which required the elimination of variable costs from the minimum commodity bills of pipeline tariffs. This action had the effect of providing greater flexibility to distributors to implement least-cost purchasing strategies. At the same time, it made possible increased competition between suppliers which also had the effect of causing both pipelines and their producer suppliers to attempt to reduce costs in order to remain competitive and avoid the loss of sales.

The Commission's transportation programs were, for the most part, in place during 1984; however, the Commission continued to encourage the use of available capacity for transportation purposes and the quantities of gas transported increased significantly. The opportunity to purchase gas in the field and have it transported increases competition and improves the conveyance of price signals from the burnertip to the wellhead. In December 1984, a Notice of Inquiry was issued to determine to what extent, if any, the existing transportation programs should be changed to make them more responsive to increased competition at the wellhead, city gate, and burnertip.

## QUESTION FOR THE RECORD FROM SENATOR DOMENICI

### Contract Carriage Authority

10. Question: Mr. Chairman, I wish to compliment you and your Commission on undertaking an inquiry into contract carriage. My question is, if you find that the FERC has authority to act in this regard, do you have funds in your FY 1986 budget request for the activities you would have to undertake?

Answer: The Commission's FY 1986 budget request includes sufficient funds to carry out all the legislative responsibilities of the Commission. However, neither the Natural Gas Act (NGA) nor the Natural Gas Policy Act (NGPA) expressly grants to the Commission statutory authority to require natural gas pipelines to transport gas for others. I, along with my four colleagues, expressed this opinion in our response to an inquiry from Congressman Dingell and Congressman Broyhill of the House Subcommitte on Oversight and Investigations on January 22, 1985. In our response, we stated that while the NGA authorizes the Commission to order jurisdictional pipelines to extend, improve, or connect their facilities and to sell gas to municipalities and other distributors, it does not authorize the Commission to order pipelines to transport gas for others.

QUESTIONS FOR THE RECORD FROM SENATOR EVANS

Mandatory Wheeling Cases

11a. Question: The criteria listed in Sections 210 and 211 of the Federal Power Act appear to make it extremely difficult for an electric utility to receive a favorable order from FERC for a request for mandatory wheeling. How many cases have been initiated before FERC in the six years the law has been in existence?

Answer: Four cases have been initiated before FERC.

11b. Question: How many were approved and how many were denied? Please provide copies of the relevant Order of denial or approval, along with the explanation for your decisions.

Answer: All four cases were set for hearing. Two of the cases were settled by the parties involved (Docket Nos. EL79-8-000 and EL83-4-000), one case was denied (Docket No. EL-80-7-000), and the fourth case was recently set for hearing (Docket No. EL-85-12-000) Copies of the orders containing the basis of the Commission's decisions are attached. The four cases are: (1) Central and Southwest Companies vs. Electric Reliability Council of Texas (Docket No. EL79-8-000), (2) Wabash Valley Power Association vs. Northern Indiana Public Service Company (Docket No. EL83-4-000), (3) Southeastern Power Administration vs. Kentucky Utilities Company (Docket No. EL80-7-000), and (4) City of Manti, Utah vs. Utah Power & Light Company (Docket No. EL85-12-000).

25 FERC ¶61,204

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Southeastern Power Administration )
)
v. ) Docket No. EL80-7-000
)
Kentucky Utilities Company )

## OPINION NO. 198

## OPINION AND ORDER DENYING
## APPLICATION FOR AN ORDER TO COMPEL WHEELING

Issued: November 8, 1983

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UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Southeastern Power Administration )
)
v. ) Docket No. EL80-7-000
)
Kentucky Utilities Company )

## OPINION NO. 198

## APPEARANCES

Curtis M. Bell and Richard K. Pels for Southeastern Power Administration.

James E. Wilson for the City of Paris, Kentucky.

Malcolm Y. Marshall, William J. Madden, Jr., and Stephen E. Embry for Kentucky Utilities Company.

Sandra J. Strebel, Ron M. Landsman, and Frances Francis for the Cities of Barbourville, Bardstown, Corbin, Falmouth and Frankfort, Kentucky.

Bernard A. Cromes and Frederick G. Minnis, Jr., for the Staff of the Federal Energy Regulatory Commission.

WHEELING
TRANSMISSION

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: C. M. Butler III, Chairman; */
J. David Hughes, A. G. Sousa
and Oliver G. Richard III.

Southeastern Power Administration )
)
v. ) Docket No. EL80-7-000
)
Kentucky Utilities Company )

## OPINION NO. 198

## OPINION AND ORDER DENYING APPLICATION FOR AN ORDER TO COMPEL WHEELING

(Issued November 8, 1983)

## I.

This is a case of first impression. It concerns the interpretation of sections 211 and 212 of the Federal Power Act, 16 U.S.C. §§824j and 824k (Supp. III 1979). These sections, which were added to the Power Act when Congress enacted the Public Utilities Regulatory Policy Act of 1978, Pub. L. No. 95-617, 92 Stat. 3117 (1978), gives the Commission the authority to order in certain limited circumstances an electric utility to transmit, or wheel, electric power and energy generated by someone else. The Southeastern Power Administration (SEPA) asks us to use the authority section 211(a) grants us to order Kentucky Utility Company (Kentucky) to wheel power and energy to eight municipally-owned utilities. Kentucky opposes SEPA's application. For the reasons set forth below we deny the application. 1/

## II.

SEPA is a separate regional agency within the Department of Energy that markets power and energy generated at 21 dams built and maintained by the Corp of Engineers in eight southeastern states. SEPA sells power from these projects in the

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*/ Chairman Butler resigned effective October 7, 1983, but had previously voted on this order.

1/ Kentucky has filed a motion requesting an oral argument. We see no need for oral argument before deciding the case and shall therefore deny the motion.

states of Illinois, Indiana, Kentucky, Tennessee, Mississippi, Alabama, Florida, Georgia, South Carolina, North Carolina, and Virginia. 2/ Section 5 of the Flood Control Act of 1944 directs SEPA to "transmit and dispose of such power and energy in such manner as to encourage the most widespread use thereof at the lowest possible rates to consumers...." 3/ The same section requires that SEPA give a preference in the sale of power and energy to cooperatives and public bodies, such as municipally-owned utilities. Following this mandate, SEPA has decided to sell 25 MW of firm peaking power and 36,000 MWH of energy to eight municipally-owned utilities that distribute electricity at retail in the state of Kentucky.

Kentucky Utilities is a medium-sized, vertically-integrated investor-owned utility. It generates, transmits, and distributes electricity at retail in widely-scattered areas across the state of Kentucky. 4/ It also sells electricity at wholesale to distribution systems and to other vertically-integrated utilities. Kentucky's transmission lines cover about two-thirds of the state and are the only transmission lines to the municipal systems SEPA wants to serve. 5/

Seven of the eight municipal systems to whom SEPA wants to sell, the cities of Barbourville, Bardstown, Benham, Corbin, Falmouth, Frankfort, and Nicholasville, own no generating units. So they buy all the electricity they distribute from Kentucky. The eighth, the city of Paris, owns more than enough generating units to meet its own requirements. Nevertheless, it buys most of the electricity it distributes from Kentucky. It does so because its generating units are very expensive to operate. 6/ Thus, each of the municipal systems SEPA wants to serve is now in effect a wholesale distribution customer of Kentucky.

SEPA owns no transmission lines, and Congress has never appropriated any funds to allow SEPA to build transmission lines. Hence, if SEPA is to sell to the municipals, it needs to have another utility transmit or wheel the power and energy to them. Because Kentucky has the only transmission lines to the municipals, SEPA asked Kentucky to wheel. SEPA and Kentucky attempted to negotiate a wheeling agreement satisfactory to both. When these attempts proved unsuccessful, SEPA filed its application in this case asking us to issue an order compelling Kentucky to wheel.

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2/ For maps of SEPA's system, see Exhs. 3 and 6.

3/ 16 U.S.C. § 825s (1976).

4/ For a map of Kentucky's service area, see Exh. 35.

5/ See Tr. 1268 and Exhs. 37 and 38.

6/ Exh. 86 at 8.

## III.

For its application to be granted, SEPA must show that the requirements of sections 211 and 212 are satisfied. These sections require us to make many positive and negative findings. The important ones are that SEPA must show that the proposed order:

(1) Is in the public interest (§211(a)(1)),

(2) Would either —

(a) conserve a significant amount of energy (§211(a)(2)(A)),

(b) significantly promote the efficient use of facilities and resources (§211(a)(2)(B)), or

(c) improve the reliability of any electric utility system to which the order applies (§211(a)(2)(c), and

(3) Meets the requirements of section 212. The most significant requirements of this section are that no order may be issued unless the order:

(a) is not likely to result in a reasonably ascertainable uncompensated economic loss for any electric utility affected by the order (§212(a)(1)),

(b) will not place an undue burden on an electric utility affected by the order (§212(a)(2)),

(c) will not unreasonably impair the reliability of any electric utility affected by the order (§212(a)(3)), and

(d) will not impair the ability of any electric utility affected by the order to render adequate service to its customers (§212(a)(4)).

In addition, SEPA must show that the order:

(4) Would reasonably preserve existing competitive relationships (§211(c)(1)), and

(5) Would not require the electric utility subject to the order to transmit during any period an amount of electric energy which replaces any amount of electric

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energy required to be provided to the applicant pursuant to a contract during such period or currently provided to the applicant pursuant to a rate schedule on file during the period with the Commission (§211(c)(2)).

The law judge considered each of these requirements in his initial decision. 7/ He held that while SEPA had shown the requirements of section 212 were satisfied, it had not shown that the other requirements would be. The law judge also held that the "transaction proposed by SEPA... does not constitute a request for the performance of a transmission service which may be the subject of an order pursuant to subsection 211(a) of the Federal Power Act...." Accordingly, the law judge denied SEPA's application.

SEPA urges us to reverse the law judge and grant the application. The six municipal systems that intervened (Cities) take the same position. 8/ Kentucky and our staff supports the law judge's ultimate conclusion that the application should be denied. But both contend that the judge erred in the way he resolved some specific issues.

## IV.

The parties' exceptions to the initial decision are numerous. They cover just about all the issues the law judge decided. And they are not frivolous. They reveal serious problems with the law judge's initial decision. But we need not consider most of the parties' arguments. The judge held that the requirements of subsection 211(c)(1) would not be satisfied. This subsection provides that:

> No order may be issued under subsection 211(a) unless the Commission determines that such order would reasonably preserve existing competitive relationships.

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7/ 16 FERC ¶63,051 (1981).

8/ Five of the municipals that intervened, the cities of Barbourville, Bardstown, Corbin, Falmouth, and Frankfort, are represented by common counsel and filed a joint brief on exceptions. The sixth, the city of Paris, is represented by different counsel and filed a separate brief on exceptions. But in this brief Paris adopted the arguments of the other municipals. We therefore refer to the six municipal intervenors as one group.

This is in effect a threshold requirement. If the order SEPA seeks will not reasonably preserve existing competitive relationships, we cannot issue the order even though all the other requirements of sections 211 and 212 are satisfied. 9/ Hence, if the law judge was correct in holding that the proposed order will not reasonably preserve existing competitive relationships, we need go no farther. Though we do not agree with the law judge's reasoning, we find, based on our independent review of the statute, its legislative history, and the record, that the order will not reasonably preserve existing competitive relationships. Hence we affirm the initial decision.

## V.

### A.

What subsection 211(c)(1) directs us to consider is not clear. To be sure, it is certain that this subsection directs us to consider the changes the proposed wheeling would make in the competitive relationships of SEPA and Kentucky in a particular market. But the particular market we are to examine is not certain. The key phrase, "existing competitive relationships", is ambiguous. It can be interpreted in two ways. According to Kentucky, the phrase means the competitive relationships SEPA and Kentucky have towards the eight municipals to whom SEPA wants to sell. Thus, Kentucky argues that the market subsection 211(c)(1) directs us to consider is small. According to the Cities, however, the relevant market is broad. They argue that the phrase "existing competitive relationships" means the competitive relationships SEPA and Kentucky have towards all the wholesale customers for whose business both can compete.

If Kentucky's interpretation is correct, the factual analysis is simple. All we need to do is to compare what Kentucky and SEPA now provide the municipals and what they would provide if wheeling is ordered. Kentucky now provides almost all the power and energy the municipals require. And, because the 25 MW of power and 36,000 MWH of energy SEPA wants to sell is less than the municipals' total requirements, Kentucky would continue to

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9/ Senator Johnston, a manager of the bill, explained during the conference committee deliberations that "[t]his [subsection 211(c)(1)] is a negative finding that overrides all of those three [requirements of subsection 211(a)(2) that the order conserve energy, promote efficiency, or improve reliability]." Transcript of the Joint Conference on Energy, November 18 and 28, 1977, at 2647 [hereinafter cited as Joint Conference Proceedings].

provide substantial amounts of power and energy to them. But it would provide less. According to figures in SEPA's application, Kentucky would provide about 18% less of the municipals' power requirements and about 6% less of the municipals' energy requirements. 10/ SEPA, on the other hand, now provides nothing to the eight municipals. Hence, if wheeling is ordered, SEPA would provide 18% of the municipals' power requirements and 6% of their energy requirements.

If the Cities' interpretation is correct, the factual analysis is much more complicated. As is done in antitrust cases, the product and geographic markets in which SEPA and Kentucky compete must be defined, market shares computed, and the changes examined.

The Cities defined one product market. They say that this is the market for wholesale sales of electricity. 11/ But they defined alternative geographic markets. Their preferred geographic market is the overlapping areas SEPA and Kentucky consider to be their marketing areas. This market consists of Kentucky's service area and the service areas of the utilities in Tennessee, Illinois, and Indiana with which Kentucky is interconnected. Wheeling SEPA's power and energy to the eight municipals will make no change in SEPA's share of this market and no perceptible change in Kentucky's share. 12/

The Cities' other geographic market is smaller. It is defined by Kentucky's service area because Kentucky said that it did not seek to make sales beyond this area. 13/ The Cities include in this market Kentucky's wholesale sales to its distribution customers. They also include Kentucky's sales at retail. They do so on the theory that the communities now

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10/ These figures are from 1978. Because the municipals are growing, the percentage declines would be somewhat smaller if figures from later years were used. For example, based on 1981 figures from Kentucky's Form 1, Kentucky would provide about 16.6% less of the municipals' power requirements and 5.25% less of their energy requirements. We use the 1978 figures because the parties continue to rely on them.

11/ Tr. 1089.

12/ Tr. 1091. There is no change in SEPA's market share because the power and energy it wants to sell to the municipals is now sold to another utility in the market.

13/ SEPA and the staff agree with this definition of the market.

served by Kentucky at retail can always form a distribution system for whose business SEPA could compete. Kentucky currently provides almost all of the power and energy in this market. If SEPA were to sell power and energy to the municipals, Kentucky would, based on 1978 figures, provide about 1.3% less of the market's power requirements. 14/ The decline in Kentucky's energy sales in this market would be even smaller.

The changes in competitive relationships that are to be prohibited by subsection 211(c)(1) are also uncertain. The phrase "reasonably preserve" is not precise. But the statute's imprecision has not created much controversy in this case. Kentucky contends that an order whose effect is to transfer the supply of 10% of a market's power requirements and 6% of its energy requirements from one utility to another is not an order that reasonably preserves existing competitive relationships. No one disputes this contention if Kentucky has correctly interpreted the phrase "existing competitive relationships." The Cities, on the other hand, contend that a wheeling order that makes no perceptible change in one market and only a slightly noticeable change in another is an order that reasonably preserves existing competitive relationships. Kentucky does not dispute this contention if the Cities have correctly defined the markets. 15/ Thus, the resolution of this case turns on whether Kentucky's or the Cities' interpretation of "existing competitive relationships" is correct. 16/

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14/ The 1.2% figure given by the Cities' witness, tr. 1114, is based on 1980 figures.

15/ Kentucky does argue, however, that the Cities have made numerous errors in defining their product and geographic markets. Thus, Kentucky argues that, even if "existing competitive relationships" means the competitive relationships SEPA and Kentucky have towards all wholesale customers for whose business both can compete, the relevant market in which they compete is much smaller than the Cities say it is. In view of our resolution of this case we need not address these arguments.

16/ The staff appears to argue that subsection 211(c)(1) does not apply in this case. They do so because SEPA does not now serve the municipals. Hence, the staff argues, SEPA and Kentucky do not have an existing competitive relationship towards the municipals. Accordingly, the proposed wheeling will not affect existing competitive relationships.

This argument is incorrect. As we shall show below, *infra* p. 10, the conference report makes it plain that we are to examine changes in the competitive relationships among utilities "serving or seeking to serve" the same customers. SEPA is "seeking to serve" the municipals.

### B.

Either interpretation is consistent with the words in the statute. So the choice between the two interpretations must be based on which carries out Congress' intent in enacting subsection 211(c)(1) as that intent is revealed in the legislative history. Both Kentucky and the Cities have addressed this question. Each argues that only its interpretation does.

Kentucky's position is quite straightforward. By enacting subsection 211(c)(1), Kentucky argues, Congress intended to prohibit the Commission from ordering wheeling where the result would be to disturb existing marketing patterns. Thus, according to Kentucky, if the utility that is to be ordered to wheel has all the business of the customer that is to receive the power, subsection 211(c)(1) prevents the Commission's taking that business from the utility and giving it to another. Kentucky's interpretation carries out this intent. By focusing on the competitive relationships SEPA and Kentucky have towards the eight municipals, Kentucky's interpretation shows whether the existing marketing pattern will be disturbed.

The Cities position is more complicated. They say that wheeling inherently increases competition since it introduces a seller into a given marketing area. "[I]t opens the door to competitive bulk power suppliers and frees wholesale customers like distribution utilities from the economic control of the utility on whose [transmission] lines they happen to be located. Thus, Congress' choice of wheeling as the remedy for eliminating some inefficiencies and waste in the electric power industry reflects its own preference for unrestricted and open competition rather than regulatory control as part of the solution for national energy problems." 17/ According to the Cities, subsection 211(c)(1) reflects this choice because it "guarantees that existing competitors, the wheeling utility most likely, will not be unduly hampered in their own competitive efforts." 18/ The Cities' interpretation carries out this intent. By focusing on the overall competitive relationship between SEPA and Kentucky, the Cities' interpretation gives some indication of the impact wheeling will have on Kentucky's ability to compete. 19/

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17/ Reply Brief for Cities at 42 (footnote omitted).

18/ *Id.*

19/ In their trial brief, at 10, the Cities say that subsection 211(c)(1) "is designed to protect each utility's ability to compete...."

C.

Though somewhat overstated, we find Kentucky's understanding of Congress' intent to be correct. There are two reasons.

(1) We begin with the conference report on subsection 211(c)(1). There it is said that:

> The conferees do not intend that the Commission order wheeling which significantly alters the competitive relationships among utilities in competition with one another for the same customers. 20/

This sentence gives some precision to the statutory phrase "reasonably preserve." Existing competitive relationships are not to be significantly altered. The sentence also tells us that the "existing competitive relationships" we are to look to are the competitive relationships between SEPA and Kentucky for the business of the "same customers." But there is still an ambiguity. The phrase "same customers" can be interpreted in the same way as the phrase "existing competitive relationships" can be. The "same customers" can mean the eight municipals customers Kentucky now serves and SEPA seeks to serve. That is, the "same customers" can mean the customers that are to receive the energy to be transmitted pursuant to the order. This meaning supports Kentucky's interpretation of "existing competitive relationships." But the phrase "same customers" can also mean all those customers for whose business SEPA and Kentucky can compete. This meaning supports the Cities' interpretation of "existing competitive relationships."

This ambiguity, however, is more apparent than real. The context makes it fairly clear that the phrase "same customers" means the customers who are to receive the energy to be transmitted pursuant to the order.

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20/ H.R. Rep. No. 1750, 95th Cong., 2d Sess. 92, reprinted in 1978 U.S. Code Cong. & Ad. News 7797, 7826 [hereinafter cited as Conference Report].

The immediately preceding sentence provides that among the competitive relationships we must consider in applying subsection 211(c)(1) are those between "utilities serving or seeking to serve the ultimate consumers..." 21/ Accordingly, we are not to order wheeling that significantly alters the competitive relationships among utilities in competition with one another for the same wholesale customers or the same retail customers. 22/

The conferees do not tell who the same wholesale customers are. But the conferees do tell us who the same retail customers are. And these customers are not all the retail customers for whose business the two utilities can compete. They are the "ultimate consumers of the electric energy transmitted pursuant to the order." 23/ Thus, in dealing with retail competition the conferees did not intend for us to focus broadly, as the Cities would have us do, on the impact wheeling would have on the utilities' overall ability to compete. Instead, they intended us to focus narrowly on the changes wheeling would make in the relationships the utilities have with the customers who are to receive the energy to be transmitted. Nothing in the conference report suggests the conferees intended us to do something different when we deal with wholesale competition. Hence we think it probable that in dealing with wholesale competition the conferees intended for us to focus narrowly, as Kentucky would have us do, on the changes wheeling would make in the wheeling utility's relations with the customers who are to receive the energy and to use subsection 211(c)(1) to prohibit wheeling where the changes are significant.

(2) The development of the provision of the the Public Utilities Regulatory Policy Act (PURPA) on wheeling confirms this inference.

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21/ Id.

22/ There may be some retail competition between Kentucky and the municipals for the same customers. But there is no contention here that the proposed wheeling would significantly alter those competitive relationships.

23/ Conference Report at 92.

As passed by the House, the goals of the bill that became PURPA were to encourage conservation of energy resources and to improve the efficiency of the electric utility industry. 24/ These goals are reflected in the House's decision to amend the Federal Power Act to give the Commission a very broad authority to order utilities to wheel. 25/ That decision had another purpose, however. The House also intended the Commission to use its authority to order wheeling to increase competition. The committee report says:

> The committee is interested in the wheeling of power as a means to increase the efficiency of the generation and transmission of electric power and the competition in the bulk power supply market, to provide access to bulk power by utility systems and qualifying cogeneration facilities to increase system reliability. 26/

Several senators who sought to amend the Senate's version of PURPA to include a wheeling provision similar to the one in the House bill stated the same purpose much more sharply. For example, Senator Sasser, who proposed this amendment, said:

> The adoption of my [wheeling] proposal would have a procompetitive effect. Electric utility systems purchasing wholesale power for all or part of their needs are frequently islands in the service area of a larger utility system. Absent an agreement by the larger utility to wheel power ... these wholesale purchasers of electricity are captive customers of the larger system with no opportunity to "shop" for power. The refusal to wheel has in the past been used as a means of retaining customers while charging more than a just and reasonable price for wholesale sales. Such anticompetitive practices can be eliminated if the Commission is granted the authority to require wheeling. 27/

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24/ H. R. 8444, 95th Cong., 1st Sess. §501 (1977).

25/ H. R. 8444, §541(b).

26/ H. R. Rep. No. 496, Appendix IV, 95th Cong., 1st Sess. 152, *reprinted in* *1978 U.S. Code Cong. & Ad. News* 8454, 8593. The Carter Administration's proposal to give the Commission an even broader authority to order wheeling was similarly intended. See S. Rep. No. 442, 95th Cong., 1st Sess. 32-33, *reprinted in* *1978 U.S. Code Cong. & Ad. News* 7903, 7929. (statement of David J. Bardin, Deputy Administator, Federal Energy Administration, in support of the Carter Administration's bill).

27/ 123 Cong. Rec. S16496 (daily ed. Oct. 6, 1977).

Senator Nelson was even more graphic:

> This [voluntary wheeling] has worked to the detriment of many small cooperatively and municipally owned electric utilities. The record is replete with evidence of large utilities refusing to provide some of these services on a voluntary basis when they are indeed capable of providing them. The result is that many small utilities have been cut off from essential power supplies. The net effect of [this] refusal to provide some of these services is that cooperatives and municipally owned systems may have to go out of business and thus what little competition there is in the industry is reduced. 28/

These statements are consistent with the Cities' understanding of Congress' intent. But they are of little value except as background. The bill that was enacted was neither the House bill nor Senator Sasser's amendment. 29/ It was a compromise between the House bill and the radically different version of PURPA the Senate passed. 30/ It is Congress' intent with respect to this compromise that is controlling.

The difference between the two versions was that the Senate bill did not provide for wheeling. According to Senator Johnston, who was one of the bill's managers in the Senate, there were two reasons the bill did not deal with wheeling. The first was that wheeling had nothing to do with the goals of the bill, which were to conserve energy and to promote the efficient use of facilities and resources. Instead, wheeling deals with "competition among various generating groups." 31/ The second was that the committee did not want to involve the Commission in the competitive struggle among these various groups. As Senator Johnston explained:

> The committee did not want to use the power of the Federal Government, at least not on the basis of the record and the hearings we have had, to permit what some utilities regard as piracy -- that is, to require a utility to wheel the power from some other utility's generating

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28/ *Id.*

29/ Sen. Sasser withdrew his amendment without a vote. *Id.* at S16497.

30/ S. 2114, 95th Cong., 1st Sess. (1977).

31/ 123 Cong. Rec. S16375 (daily ed. Oct. 5, 1977).

> plant to one of its wholesale customers;
> in effect, to require a utility to furnish
> the rope to hang itself or to risk losing
> some of its retail or wholesale customers. 32/

Thus, the House viewed wheeling as an important aid to conserving energy and as a means of increasing competition by giving wholesale customers, primarily small, publicly-owned distribution systems surrounded by their historic supplier, access to alternative suppliers. The Senate, on the other hand, did not think wheeling had anything to do with conserving energy and did not want to use wheeling to give wholesale customers access to alternative suppliers. As we read the conference committee deliberations, the essential compromise was that the House prevailed on having a wheeling provision in the bill to conserve energy while the Senate prevailed on not using wheeling to increase competition. This compromise is reflected in the following statement of Senator Metcalf:

> It seems to me that a reasonable order from the Federal Power Commission requiring utilities to wheel power for other utilitites upon request ...., with the same sort of protective devices which we have put in for inter-connection, *so that there would not be any loss of customers*, there would not be any detriment to the utility that would [do] the wheel[ing], would compliment and supplement the decision we have made on the interconnection [provision of Section 210], and would only be a slight step toward providing the necessary reliability of power nationally. 33/

That the House prevailed on using wheeling to conserve energy is obvious. Congress amended the Power Act to include subsection 211(a) to authorize the Commission to order wheeling where wheeling would conserve energy, promote efficiency, or improve reliability. 34/

That the Senate prevailed on not using wheeling to increase competition is not so obvious. The House conferees readily agreed that there should be no pirating of the wheeling utility's retail

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32/ *Id.*

33/ Joint Conference Proceedings at 2742 (emphasis added).

34/ The Senate conferee's agreement to the inclusion of a wheeling provision was premised on the recognition that "there is some energy to be saved with wheeling." *See* Joint Conference Proceedings at 2021-22 (statement of Sen. Johnston).

customers. This is reflected in the House conferees' agreement to a provision proposed by the Senate conferees that would prohibit wheeling to ultimate consumers. 35/ This prohibition became subsection 211(c)(4) of the Power Act. 36/

But what of wholesale customers? The Senate conferees proposed a similar provision that would have prohibited wheeling to the wheeling utility's wholesale customers. 37/ The House conferees did not agree to this provision, and it did not become part of the statute. This might suggest that the Senate did not prevail at least with respect to wholesale competition. But that is not so. The House conferees agreed with the Senate conferees that the wheeling utility should be protected against the loss of its wholesale customers. As Representative Dingell said:

> I have no objection whatsoever in protecting a utility in a reasonable fashion against what has been termed piracy. Again, that is a utility

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35/ In fact, the House bill had a similar provision. H.R. 8444 §541(b). The House's reason for including this provision was explained by Rep. Dingell:

> [W]hat the House is really troubled about, and it was a concern that was brought to our attention, was that a major consumer of electric power, let's say the World Trade Center or a major steel facility, or an auto plant, or some major electric consumer, industrial customer, who would be buying electric power from a utility[,] would want to get electric power wheeled in by a competitor and be able to shop around amongst the country, and force his previous supplier to wheel in power to him for essentially retail purposes, he could not get away with that because we don't feel that is fair.

Joint Conference Proceedings at 2744-45.

36/ Subsection 211(c)(1) adds to the protection given by subsection 211(c)(4) by prohibiting the indirect use of wheeling to "pirate" another utility's retail customers. For example, a utility might seek wheeling so that it would have sufficient power and energy to serve a large industrial customer that is currently served by another utility. Subsection 211(c)(4) does not prohibit wheeling in this instance. But subsection 211(c)(1) does.

37/ Joint Conference Proceedings at 2747-48 (statement of Sen. Johnston).

> within the boundaries of another utility being able to enforce the wheeling in -- being used to wheel in power from without.... 38/

Hence Representative Dingell suggested that some language might be added to the bill to protect the wheeling utility against what Senator Johnston called "piracy." 39/

The reason the House conferees did not agree to do so by means of a flat prohibition against wheeling to the wheeling utility's wholesale customers was that such a prohibition would be overly-broad. It would preclude wheeling in situations where "piracy" would not occur. 40/ As explained by Representative Dingell, these situations are two:

> (a) The first is exemplified by the City of Richmond, Indiana, "coal-by-wire" case. 41/ Richmond has generation of its own. But it also buys supplemental power from Indiana & Michigan Electric Company and is thus a wholesale customer of Indiana & Michigan. During the Arab oil embargo of 1973-74 Richmond wanted to sell some of its excess power to utilities in New England that were short of fuel oil. Because Richmond is surrounded by Indiana & Michigan, Richmond needed Indiana & Michigan to wheel. Indiana & Michigan declined to do so. 42/ Here, wheeling would not cause the wheeling utility to lose any sales to its wholesale customer. So there is no problem with pirating.
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> (b) The other situation is where the wheeling utility will transmit the power across its system to a neighboring utility. Frequently, the utility and its neighbor will have an interchange agreement that allows the utilities to exchange power in certain situations. So the utility that is to receive the energy to be transmitted will often be a wholesale customer of the wheeling utility. But any sales the wheeling utility might make to its neighbor

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38/ Joint Conference Proceedings at 2745-46.

39/ Id. at 2746.

40/ Joint Conference Proceedings, at 2748-49 (statement of Rep. Dingell).

41/ Rep. Dingell mentioned the Richmond situation. Joint Conference Proceedings at 2749.

42/ For a fuller description of the Richmond situation, see New England Power Pool Participants, 52 FPC 410 (1974), reh. denied, 54 FPC 1375 (1975), aff'd sub nom. Richmond Power & Light v. F.E.R.C., 574 F.2d 610 (D.C. Cir. 1978).

> pursuant to an interchange agreement are usually incidental to its main business of providing power and energy to retail customers and wholesale distribution systems. 43/ Moreover, the power and energy to be transmitted probably will not displace power and energy the wheeling utility provides to its neighbor. More likely than not, the power and energy to be transmitted is in addition to what the wheeling utility already supplies or replaces what the wheeling utility cannot supply. So there should usually be little or no harm to ordering a utility to wheel to this type of wholesale customers. 44/

Thus, what the conferees agreed to was that the wheeling utility should be protected against losing wholesale customers within its service-area to other bulk power suppliers. Since this agreement is embodied in subsection 211(c)(1), we cannot conclude that the legislative intent of this subsection was to protect the wheeling utility's ability to compete. Rather, the intent was to protect the wheeling utility's relations with specific customers from being significantly altered by wheeling. Accordingly, the proper way to determine whether existing competitive relationships would be reasonably preserved is to compare what the wheeling utility currently sells to the customers that are to receive the power and energy to be transmitted and what the utility would sell if it were ordered to wheel. In short, Kentucky's interpretation of subsection 211(c)(1) carries out the legislative intent.

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43/ Sales made pursuant to an interchange agreement are usually made on an "as available" basis. That is, the sale is made if the utility has the power and energy available. But usually nothing in the agreement requires the utility to have the power and energy available. For this reason such sales are often referred to as "opportunity sales".

44/ The word "usually" must be emphasized. There may be situations where wheeling to an interchange customer of the wheeling utility would significantly alter existing competitive relationships. The City of Paris can be said to present such a situation. We have previously characterized Paris as a distribution customer. Supra p. 2. We did so because Paris buys almost all of its energy requirements from Kentucky. But the facts are somewhat more complicated and permit Paris to be characterized differently. Paris has its own generating units and it buys energy from Kentucky pursuant to an interchange agreement. The agreement specifies that Kentucky will provide energy on an "as available" basis. See Exh. 86. See generally, Kentucky Utilities Company, Opinion No. 116, 15 FERC ¶61,002, reh. denied, Opinion No. 116-A, 15 FERC ¶61,222 (1981). Hence Paris can be characterized as a neighboring interchange customer of Kentucky. Nevertheless, wheeling SEPA's energy to Paris would replace energy Kentucky now provides and would significantly alter existing competition relationships.

## VI.

When we interpret an important statute for the first time, we cannot restrict ourselves simply to determining the legislative intent on the particular provision of the statute in question. We must also consider whether the interpretation given to the particular provision makes sense in view of the whole statute. The important question here is whether the interpretation we give the particular provision will enable us to carry out Congress' purpose in enacting the statute. The Cities argue that the interpretation we give to subsection 211(c)(1) makes no sense in view of the whole statute and will defeat Congress' purpose in enacting subsection 211(a). This is so, the Cities argue, because "[the interpretation] suggests that what Congress gave with the right hand [§211(a)] -- a new remedy, supplemental to that of the antitrust laws, mostly designed to break up a transmission monopolist's interference with the efficiencies that derive from a competitive electric power market where purchasers have alternative offerings from which to select the lowest-priced supply, where [the interference] would also countermand federal energy policy -- it took away with the left [§211(c)(1)], by prohibiting wheeling orders which have any pro-competitive effect. The logic of the statute and its legislative history refutes [this] claim." 45/

This argument has appeal. Wheeling is most often considered in the context of antitrust cases. 46/ The problem presented in those cases is exactly that a distribution customer that cannot receive power from alternative suppliers unless its historic supplier wheels and that has been denied wheeling for anticompetitive reasons. Courts and administrative agencies can and do order the customer's supplier to wheel to remedy this problem of anticompetitive conduct. So its natural to assume that because Congress gave the Commission the authority in section 211 to order utilities to wheel, it wanted to remedy the same problems presented in antitrust cases. If that is the problem Congress wanted to remedy, then our interpretation of subsection 211(c)(1) must be rejected. In most instances it will preclude our ordering a utility to wheel to its distribution customers -- the very situation in which Congress supposedly saw a problem. Nevertheless, we cannot accept the Cities' argument. Anticompetitive conduct was not the problem Congress sought to remedy by enacting subsection 211(a). This conclusion rests on three grounds.

First, nothing in the conference deliberations or floor debates suggests, let alone shows, that in enacting subsection 211(a) Congress wanted to remedy problems caused by a utility's anticompetitive refusals to wheel. Like the dog that did not bark in the night

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45/ Trial Brief for Cities at 11.

46/ See, e.g., Otter Tail Power Co. v. United States, 410 U.S. 366 (1973); City of Chanute v. Kansas Gas and Electric Co., 564 F. Supp. 1416 (D. Kansas 1983), appeal docketed, No. 83-1818 (10th Cir. June 24, 1983).

this silence is telling. 47/ If Congress had intended subsection 211(c)(1) to remedy that problem, we would expect some statement somewhere expressing that sentiment. But there is no such statement. This suggests to us that Congress did not intend subsection 211(a) as a remedy for a utility's anticompetitive conduct.

We need not rely on silence, however. The legislative history shows that Congress did not intend subsection 211(a) to be a new tool, supplementing those already provided by the antitrust laws, for remedying anticompetitive conduct. PURPA as whole was designed to be competitively neutral. It does not detract from the authority the Commission has under other sections of the Federal Power, principally sections 205 and 206, to remedy anticompetitive conduct. But neither does PURPA grant the Commission any additional authority. This is shown in subsection 4(2) of PURPA, 16 U.S.C. §2603 (Supp. III 1979), and the conference report on this subsection. Subsection 4(2) provides that:

> Nothing in this Act or in any amendment made by this Act affects --
>
> > (2) any authority ... of the Commission under any other provision of law (including the Federal Power Act and the Natural Gas Act) respecting unfair methods of competition or anticompetitive acts or practices.

This makes clear that whatever authority the Commission had to remedy anticompetitive conduct before PURPA was enacted remained. The conference report makes clear that the Commission gained no new authority to remedy anticompetitive conduct. The conference report states:

> The conferees intend that the provisions of the conference substitute be strictly neutral and not add or subtract from the immunities and defenses available under [other provisions of law respecting unfair methods of competition or anticompetitive acts or practices] nor add or subtract from authorities contained in such laws. 48/

Thus, we find it plain that PURPA was not designed to supplement the antitrust laws by providing the Commission with an additional means for remedying anticompetitive conduct.

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47/ Doyle, Silver Blaze in 1 The Complete Sherlock Holmes 349 (n.d.).

48/ Conference Report at 68 (emphasis added).

Subsection 211(a) is not an exception. 49/ This is shown in the statement of the late Senator Jackson, who was a manager of the bill, summarizing PURPA's wheeling provisions for the Senate during the floor debate:

> Title II of the bill establishes new authorities for the Federal Energy Regulatory Commission to issue orders for interconnection of transmission facilities and the transmission of electric energy to further energy conservation[,] efficient use of facilities or to improve reliability. The essential feature of the conference agreement is the limited nature of the authority granted the FERC [to order wheeling]. The agreement sanctions Federal action where the energy conservation and management purposes of the act are furthered but does not permit the Federal Government to involve itself, under authority of the act, on one side or the other of the economic contests among utilities for customers. This is a bill whose aim is energy conservation and improved reliability of service. 50/

This statement makes no sense if Congress' purpose in enacting subsection 211(a) was to remedy anticompetitive conduct. Ordering wheeling for that purpose would necessarily put the Commission in the position of coming down on one side in the economic contest among utilities for customers. 51/

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49/ Sen. Metzenbaum, a manager of the bill, noted during the floor debate on the conference report that the idea of "neutrality" mentioned in the conference report on subsection 4(2) is the "central element or thread tying together the other conditions and restrictions on FERC's authority [to order wheeling]...." 124 Cong. Rec. S17802 (daily ed. Oct. 9, 1978).

50/ 124 Cong. Rec. S17528 (daily ed. Oct. 7, 1978).

51/ To support their position that subsection 211(a) was designed to promote competition the Cities cite the Second Circuit's decision in *New York State Gas & Electric Corp. v. F.E.R.C.*, 638 F.2d 388 (1980), *cert. denied*, 454 U.S. 821 (1981). The court there said.:

> The new power [granted the Commission in sections 211 and 212] to order wheeling was undoubtedly intended, at least in part, to serve as a tool for enhancing competition by facilitating bulk purchases of power.

638 F.2d at 402.

[FOOTNOTE CONTINUED ON NEXT PAGE]

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The Cities contend that another sentence in the conference report on subsection 211(c)(1) shows Congress wanted to use wheeling to remedy anticompetitive conduct. The sentence states that:

> It is not the intention of the conferees that the Commission should be required to maintain or protect in any manner any relationship between utilities which is unlawful under the antitrust laws. 52/

The Cities read this sentence as not just permitting but directing the Commission to use the authority granted in subsection 211(a) to order wheeling where a utility is the sole supplier of a customer and maintains that position by exercising its monopoly power in transmission to exclude competitors.

This is incorrect. The Cities read far too much into the sentence. The sentence does not say that the Commission can or should use subsection 211(a) to remedy anticompetitive conduct. And we see no reason to interpret the sentence as if it did. 53/

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[FOOTNOTE CONTINUED FROM PREVIOUS PAGE]

This statement is indeed contrary to our reading of the legislative history. But it does not persuade us that our reading is incorrect. The case before the court was not one arising under sections 211 and 212 of the Power Act. Hence the statement is *dictum*.

More important, it appears to us that the court may have erre in its reading of the legislative history. In support of its reading the court cites only the stated purpose of the original House bill and the Carter Administration's proposals. *Supra* p. 11 & note 26. The court thus appears to have overlooked the radical changes the Senate and the conference committee made to the House's version of PURPA. We think these changes are controlling. *See supra* p. 12.

52/ Conference Report at 92. SEPA and the staff take the same positi

53/ The Cities support their interpretation with a statement of Sen. Metzenbaum. 124 Cong. Rec. S17802 (daily ed. Oct. 9, 1978). According to the Cities, Sen. Metzenbaum said that, if two utiliti are seeking to serve the same customer and one utility needed to use the transmission lines of the other to do so, subsection 211(c)(1) does not prohibit the Commission from issuing the order if the other requirements of sections 211 and 212 are satisfied.

This, however, is not quite what the Senator said. What he in fact said is that subsection 211(c)(1) is not an "absolute ban on the Commission's ordering wheeling. Subsection 211(c)(1) bans wheeling only if the order would "significantly alter" the competitive relationship. With these additions Sen. Metzenbaum's statement is perfectly consistent with our interpretation of subsection 211(c)(1).

The sentence simply reinforces the basic notion of neutrality. All it means is that, although subsection 211(c)(1) prohibits the Commission from using its new wheeling authority to remedy relationships that are unlawful under the antitrust laws, this is not to be taken as legislative approval of those relationships. The Commission retains full authority to address those relationships under other provisions of the Power Act. 54/ As Senator Metzenbaum explained during the floor debate on the conference bill:

> It was not the intent of the conferees to modify in any way the rights of parties in ... prosecuting allegations of anticompetitive conduct before Federal and State courts or before administrative agencies, including the FERC and the Nuclear Regulatory Commission. Both have legal obligations to consider antitrust issues. Where any of these agencies presently have the authority to order transmission coordination or other relief pursuant to a finding of anticompetitive conduct, undue discrimination, or unjust and unreasonable rates, terms, conditions or the like, this authority would not be disturbed. The act does not limit the present authority of these agencies in this regard.
>
> Thus, a party which has been denied wheeling services for anticompetitive reasons will not be hindered by this legislation from proceeding in the Federal courts or elsewhere. 55/

The effect of the sentence from the conference report may be shown by reference to the arguments in this case. It is argued that by virtue of owning the only transmission lines to the municipals Kentucky possesses monopoly power and that it has exercised its monopoly power by refusing to wheel SEPA's power and energy to the municipals. These arguments are irrelevant in this case. But they might be relevant in a proceeding brought under sections 205 and 206 of the Power Act and might, on a proper record, justify us in ordering Kentucky to wheel. 56/ Nothing in subsection 211(c)(1) would prevent us from doing so.

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54/ Put a little differently, the sentence is but an oblique reference to subsection 4(2) of PURPA.

55/ 124 Cong. Rec. S17882 (daily ed. Oct. 9, 1978).

56/ A cautionary note must be entered here. At present it is not entirely clear whether we may order a wheeling pursuant to sections 205 and 206 even to remedy anticomputitive conduct. See Florida Power & Light Co. v. F.E.R.C., 660 F.2d 668, 679 (5th Cir. 1981); New York State Electric & Gas Corp. v. F.E.R.C., 638 F.2d at 402-3, supra note 51; but see Richmond Power & Light Co. v. F.E.R.C., 574 F.2d at 624, supra note 42.

Finally, and most importantly, we do not need to speculate about the problems Congress wanted to remedy by enacting subsection 211(a). The conferees were fairly explicit about the problems subsection 211(a) was designed to remedy. These problems were two. Both are particular instances of the national energy crisis PURPA and the other acts that formed the National Energy Act were meant to address.

One problem is created by oil embargoes. In this situation utilities, primarily those in New England, that depend heavily on imported oil for fuel need to buy electric power and energy. The logical sellers are utilities, primarily in the Midwest, that generate most of their electricity from coal. But for the sale to be accomplished intervening utilities must wheel. And this can be a problem.

Prior to the enactment of subsection 211(a) neither the Commission nor any other agency had the authority to order the intervening utilities to wheel. Hence, if the lights were to be kept burning in New England, many utilities had to voluntarily agree to wheel. That agreement had been largely forthcoming during the oil embargo of 1973-74 and perhaps it would be forthcoming again. 57/ But it seemed obvious to the conferees that the Commission should have the authority to order wheeling. As Senator Metcalf said, "when you have coal fired powering in one area, and you have an oil shortage in another, someone should be able to make the order that one utility shall wheel for another." 58/ Subsection 211(a) gives the Commission the authority to do that.

The other problem, which was fairly extensively documented during the hearings, was overbuilding. The source of this problem was that utilities' peak loads were growing more rapidly than their base loads. This caused capacity, which is built to meet peak loads, to be idle much of the time. This increased costs and consumed scarce fuels. 59/ The remedy to this problem is to increase exchanges of reserves and diversity power among utilities. Congress provided that remedy in two ways in PURPA. First, it added section 210 to the Power Act, 16 U.S.C. §824(i) (Supp. III 1979), to expand our authority to order utilities to exchange energy and provide coordination services, such as reserve sharing.

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57/ See New England Power Pool Participant, 52 FPC 410 (1974), supra note 42. But there were some problems. The conferees were acutely aware of these problems. See the next footnote.

58/ Joint Conference Proceeding at 2742. See also id. at 2749, 2751, and 2827.

59/ See S. Rep. No. 442, 95th Cong., 1st Sess. 9, 23-26, 32.

Secondly, it added subsection 211(a) to complement section 210 by enabling us to increase the number of utilities with whom any one utility can exchange energy. As Senator Metcalf explained, "[i]nterconnecting will not do the job of saving, conservation of power, unless we have some small provision for wheeling." 60/

Viewed in this light, our interpretation of subsection 211(c)(1) does not defeat the purposes of the statute. As we have previously explained, ordering a utility to wheel power and energy to a utility outside its service area to alleviate the impact of an oil shortage or to increase coordination will probably not significantly alter the existing competitive relationships the selling and wheeling utilities have with the buying utility. 61/ Hence our interpretation of subsection 211(c)(1) will not prevent us from ordering wheeling to remedy either of the two problems Congress sought to remedy by enacting subsection 211(a).

## VII.

There is one other question. That is whether the sale of 25 MW of power and 36,000 MWH of energy will significantly alter the competitive relationships between SEPA and Kentucky towards the eight municipals. Though no one disputes Kentucky's contention that the sale would significantly alter competitive relationships, the question merits a brief discussion.

In absolute terms the amounts SEPA wants to sell to the municipals are small. In relative terms the amounts are larger. They are 18% of the power and 6% of the energy Kentucky now provides to the municipals. But even these amounts, especially the energy amount, which is the best measure of the sale's impact, are not great. In view of the small amounts SEPA has to sell in absolute terms and the modest changes the sale would make in Kentucky's relationships with the municipals, it might be argued that the proposed wheeling will not "significantly alter" existing competitive relationships.

This argument has some force. The amounts at issue are small. But we cannot agree with the argument. The basic purpose of subsection 211(c)(1) is to keep the Commission out of the economic contests among utilities for customers. Congress did not intend for the Commission to use its new authority to order wheeling to decide which utility will serve a customer. We take that purpose seriously.

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60/ Joint Conference Proceeding at 2742-43. See also id. at 2741, 2751-52; 124 Cong. Rec. S17801-2 (daily ed. Oct. 9, 1978) (statement of Sen. Metzenbaum).

61/ Supra pp. 15-16.

We are obliged to follow it. Because that is so, we must consider significant even the modest changes wheeling would make in the competitive relationships between SEPA and Kentucky towards the municipals. If we did not, we would involve ourselves in an economic contest for customers by taking some of the customers' business from Kentucky and giving it to SEPA. We therefore hold that the purposed wheeling order SEPA seeks would not reasonably preserve existing competitive relationships.

The Commission orders:

(A) The initial decision is affirmed to the extent it is consistent with this order and opinion.

(B) The application of the Southeastern Power Administration for an order to compel wheeling is denied.

(C) The motion of Kentucky Utilities Company for oral argument is also denied.

By the Commission.

( S E A L )

Lois D. Cashell

Lois D. Cashell,
Acting Secretary.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

OPINION NO. 198-A

| | | |
|---|---|---|
| Southeastern Power Administration | ) | Docket Nos. EL80-7-003 and EL80-7-004 |
| v. | ) | |
| Kentucky Utilities Company | ) | |

OPINION AND ORDER DENYING REHEARING

Issued: February 3, 1984

Branch
File Copy

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26 FERC ¶61,127

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Raymond J. O'Connor, Chairman;
Georgiana Sheldon, J. David Hughes,
A. G. Sousa and Oliver G. Richard III.

| | | |
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| Southeastern Power Administration | ) | Docket Nos. EL80-7-003 and EL80-7-004 |
| v. | ) | |
| Kentucky Utilities Company | ) | |

## OPINION NO. 198-A

## OPINION AND ORDER DENYING REHEARING

(Issued February 3, 1984)

### I.

In this case the Southeastern Power Administration (SEPA) asked us to order, pursuant to sections 211 and 212 of the Federal Power Act, Kentucky Utilities Company (Kentucky) to wheel power to eight municipally-owned utilities that now buy all, or in one case almost all, of the electricity they distribute from Kentucky. Subsection 211(a) provides that we may issue the order if the order is in the public interest, would either conserve a significant amount of energy, significantly promote the efficient use of facilities and resources, or improve reliability, and meets the requirements of section 212. But subsection 211(c)(1) provides that "[n]o order may be issued under subsection (a) unless the Commission determines that such order would reasonably preserve existing competitive relationships." In Opinion No. 198, 25 FERC ¶61,204 (1983), we determined that the order SEPA sought would not reasonably preserve existing competitive relationships. We therefore denied SEPA's request.

SEPA and five of the municipally-owned utilities (Cities) seek rehearing of that decision. They argue that for several reasons we erred in interpreting subsection 211(c)(1). We find their arguments unpersuasive. Accordingly, we deny rehearing.

II.

Subsection 211(c)(1) requires us to examine the effect an order compelling wheeling would have on existing competitive relationships and prohibits us from ordering wheeling where the effect is to "significantly alter[ ] the competitive relationships among utilities in competition with one another for the same customers." 1/ In this case the relevant competitive relationships are those between SEPA and Kentucky.

That is clear. What is not so clear is the particular competitive relationships between SEPA and Kentucky we should examine. Put into antitrust jargon, the question is, what is the "relevant market" in which SEPA and Kentucky compete?

Kentucky argued that the relevant market is defined by the competitive relationships between it and SEPA for the business of the eight municipally-owned utilities it now serves and that SEPA seeks to serve. The Cities argued that the relevant market should be defined by the competitive relationships Kentucky and SEPA have towards all wholesale customers for whose business both can compete. According to the Cities, the geographic extent of this market is the multi-state area where the marketing areas of SEPA and Kentucky overlap. As an alternative, the Cities defined a smaller geographic market limited to Kentucky's service area. In this smaller market the Cities included not only Kentucky's sales to all of its wholesale customers but also its sales to retail customers. Though SEPA does not compete against Kentucky for retail sales, the Cities argued that including Kentucky's retail sales in the market is proper because the communities now served by Kentucky at retail can always form a distribution system for whose business SEPA could compete.

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1/ H.R. Rep. No. 1750, 95th Cong., 2d Sess. 92, reprinted in 1978 U.S. Code Cong. & Ad. News 7797, 7826 [hereinafter cited as Conference Report].

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In Opinion No. 198 we adopted Kentucky's definition of the relevant market. The Cities contend that this was erroneous. This is so, the Cities argue, because a number of cases decided by the courts, the Nuclear Regulatory Commission, and this Commission establish that a utility's service area for retail and wholesale sales is the proper way to define the market for wholesale electric power. 2/

We disagree. In each case the question was how to define the market for purposes of applying the Sherman Act's prohibition against monopolization, 15 U.S.C. §2 (1976). The answer given to that question has no direct bearing on the correct answer to the question here, which is how to define the market for purposes of applying subsection 211(c)(1)'s prohibition against significantly altering existing competitive relationships. The Sherman Act is a broad remedial statute applicable to the whole economy that is "designed to be a comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade." 3/ Subsection 211(c)(1), however, is but a part of an extremely limited remedial statute applicable only to the electric utility industry "whose aim is energy conservation and improved reliability of service" but which "does not permit the Federal Government to involve itself ... on one side or the other of the economic contests among utilities for customers." 4/ Given these differences in the scope, applicability, and purposes between the Sherman Act and the statute at issue here, the answer to the market definition question cannot be found in the cases the Cities cite. Instead, the answer must be found in Congress's intent in enacting subsection 211(c)(1) of the Power Act.

Of course, what we have just said does not mean that the cases the Cities rely on could not possibly be relevant. The case could be if, as the Cities argued, Congress intended the inquiry mandated by subsection 211(c)(1) to focus broadly on the effect the wheeling order would have on a utility's

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2/ The cases are cited in the Cities' Brief on Exceptions at 41 n.5. (We note that one case the Cities cite, Cleveland Electric Illuminating Company, 7 FERC ¶63,030 (1979), aff'd, 11 FERC ¶61,114 (1980), does not appear to have involved a question concerning the definition of the relevant market.)

3/ Northern Pacific Ry Co. v. United States, 356 U.S. 1, 4 (1958).

4/ 124 Cong. Rec. S17528 (daily ed. Oct. 7, 1978) (statement of Sen. Jackson).

ability to compete. The market definitions used in the cases are designed to provide information on a firm's economic power to control prices or exclude competition. That information would be helpful in determining the effect the wheeling order would have on a utility's ability to compete. But nowhere is the statute or its legislative history is it suggested that we are to engage in such a broadly-focused inquiry.

This is not necessarily decisive. The cases the Cities rely on could still be relevant if Congress had nothing specific in mind when it directed us to examine the effect the wheeling order would have on competition. In this situation the cases would provide a source of knowledge we could not ignore. But Congress did have something specific in mind. And what it had in mind was that the inquiry should be narrowly focused on the effect the wheeling order would have on the competitive relationships the utility that wants to sell the energy and the utility that would have to wheel the energy have towards the customers that are to receive the energy. To be sure, the words of the statute, though suggestive, do not unmistakably reveal this intent. 5/ But, as we held

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5/ The key word in the statute is "existing." There is an existing competitive relationship between Kentucky and SEPA for the business of the eight municipally-owned utilities involved in this case. Kentucky now sells them energy, and SEPA seeks to sell them energy. But the competition between Kentucky and SEPA for the other customers the Cities want to include in the market is potential. For Kentucky's other wholesale customers that SEPA could serve, this is so because SEPA does not now seek to sell them energy. For Kentucky's retail customers, this is so because the communities now served by Kentucky at retail must form municipally-owned distribution systems before SEPA could serve them.

The question is whether the potential for competition between Kentucky and SEPA for the business of Kentucky's retail and other wholesale customers can be described as an "existing" competitive relationship. We think not. To be sure, it could be argued that, so long as potential competition affects a firm's market behavior, the potential for competition is an existing competitive relationship.

[FOOTNOTE CONTINUES ON FOLLOWING PAGE.]

in Opinion No. 198, this intent is revealed in the conference report and is confirmed by the development of the act in Congress. 6/

## III.

The Cities and SEPA argue that our interpretation reads the word "reasonably" out of subsection 211(c)(1) by creating an absolute ban on wheeling where, as here, the order "would change the identity of the supplier to a wholesale customer within the wheeling utility's service area." 7/ This is incorrect. Our interpretation does not create an absolute ban on wheeling in this situation. All we held in Opinion No. 198 was that a shift of 6% of the customers' energy requirements and 18% of their power requirements from one utility to another significantly alters the competitive relationships between the utilities and that therefore the

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5/ [FOOTNOTE CONTINUES FROM PREVIOUS PAGE.]

But this is a very strained interpretation of subsection 211(c)(1). The phrase "existing competitive relationships" suggests actual, not potential, rivalry. This suggestion is borne out by the conference report. There, the "existing competitive relationships" that are not to be significantly altered are defined as those among utilities "in competition with one another for the same customers." Conference Report at 92. We cannot say that Kentucky and SEPA are "in competition with one another" for the business of either Kentucky's other wholesale customers or its retail customers.

6/ 25 FERC at 61,532-36.

The Cities also complain that our definition of the market is contradicted by the testimony of their witness about the extent of the market. But the witness's testimony is inconsistent with the intent of Congress. The testimony is therefore irrelevant.

7/ Application for Rehearing for Cities at 4.

requested wheeling order would not reasonably preserve existing competitive relationships. Obviously, however, at some point the business that the wheeling order would cause to be shifted from one utility to another would be small enough that competitive relationships would not be significantly altered. 8/

SEPA also points out that during the floor debates on the conference committee's bill Senator Metzenbaum, a manager of the bill, gave an example of a situation where an order compelling wheeling would not be prohibited by subsection 211(c)(1). 9/ In the Senator's example several small utilities join together to build a generating unit so that they can "serve their own loads as opposed to purchasing power at wholesale from large investor-owned utilities." Because the generating unit might be far from some or all of its owners, the small utilities might need another utility to wheel the generating unit's power to them. Senator Metzenbaum said that an order compelling wheeling in this situation "would not, of course, be regarded as an action which would disrupt existing competitive relationships." SEPA contends that our interpretation "flatly rules out" wheeling in this situation.

SEPA is mistaken. The intent behind subsection 211(c)(1) is to prohibit wheeling when the order would significantly alter the relationships between two utilities that are competing for the business of the same customer. Thus, 211(c)(1) applies where there are at least two sellers and one buyer. That is the situation before us in this case and to which our interpretation applies. Senator Metzenbaum's example, however, does not involve two sellers competing for the business of a buyer. Hence neither 211(c)(1) nor our interpretation of that subsection has any bearing on the situation discussed by Senator Metzenbaum.

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8/ Where the line between shifts that significantly alter competitive relationships and those that do not lies is a question we necessarily leave to another day.

9/ 124 Cong. Rec. S17802 (daily ed. Oct. 9, 1978).

## IV.

The Cities and SEPA contend that the existence of subsection 211(c)(2) shows that our interpretation of subsection 211(c)(1) is erroneous. The Cities argue that our interpretation of 211(c)(1) is erroneous because, "[i]f, as the Commission reasons, the statute were interpreted to prohibit any wheeling order which would enable a customer within the wheeling utility's territory to shift from one supplier to another, then no reason would exist for retention of Section 211(c)(2)." 10/

We disagree. The problem with the Cities' argument is that it assumes we have interpreted subsection 211(c)(1) as establishing an absolute ban on wheeling when the selling utility seeks to force another utility to wheel to its customers. But we did not. 11/ Once this is understood, it is clear that our interpretation of subsection 211(c)(1) does not render subsection 211(c)(2) superfluous. In essence, subsection 211(c)(2) prohibits compulsory wheeling where the energy to be wheeled would replace "any" energy the wheeling utility is required to provide to the buyer under a contract or currently provides to the buyer pursuant to a rate schedule on file with us. 12/ This absolute prohibition ceases to apply once the contract ends and either the rate schedule is cancelled or the energy to be wheeled is in excess of what the wheeling utility

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10/ Application for Rehearing for Cities at 10 (footnote omitted).

11/ *See supra*, pp. 5-6.

12/ The statute does not use the word "buyer." It uses the word "applicant." This fact caused considerable controversy in the parties' briefs to the law judge and to us. The Cities and SEPA argued that "applicant" means the person who applies for the wheeling order, be it the seller or buyer. If so, SEPA would be the "applicant" in the case. Because Kentucky provides no energy to SEPA, the Cities and SEPA argued that 211(c)(2) does not prohibit the issuance of a wheeling order here. Kentucky argued that "applicant" means the buyer no matter who in fact submitted the papers. If this is so, the eight municipally-owned utilities would be the "applicant." Kentucky argued that, because it provides pursuant to rate schedules all or almost all of the energy the municipals distribute, 211(c)(2) prohibits the issuance of a wheeling order.

[FOOTNOTE CONTINUES ON FOLLOWING PAGE.]

currently provides pursuant to a rate schedule. Subsection 211(c)(1) then comes into play. 13/ But it does not prohibit the wheeling of "any" energy. It only prohibits the wheeling of energy that significantly alters competitive relationships. Thus, although both subsections focus on the changes wheeling would make in the business relationships the selling and wheeling utilities have towards the buyer, the two subsections perform significantly different functions. 14/

SEPA makes a slightly different argument. Relying on the maxim of statutory construction that expressio unius est exclusio alterius, SEPA argues that, because subsection 211(c)(2) absolutely bars wheeling when the energy to be wheeled would replace energy required to be provided to the buying utility under a contract or currently provided under a rate schedule, subsection 211(c)(1) cannot be interpreted, as we are said to have done, as providing a bar to wheeling when the contract ends or the power to be wheeled is in excess of what is currently provided.

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12/ [FOOTNOTE CONTINUED FROM PREVIOUS PAGE.]

We did not resolve this controversy in Opinion No. 198. But the controversy seems to have disappeared. At least, the Cities' and SEPA's arguments in their applications for rehearing presuppose that "applicant" means "buyer," for their arguments would lose what little force they have if the "applicant" could be either the buyer or the seller depending on who happened to submit the papers. Consequently, we shall accept Kentucky's interpretation of "applicant" as meaning the buyer of the energy. We do so, however, only for the purpose of deciding the applications for rehearing before us. Should the question arise directly in another case we shall take a fresh look at the meaning of subsection 211(c)(2).

13/ Subsection 211(c)(1) also applies in situations where 211 (c)(2) could not apply.

14/ An example may help to clarify the differences between the two subsections. Suppose that a vertically-integrated utility, A, wants to buy coordination services, or "opportunity sales", from another utility, B, but needs an intervening utility, C, to wheel the energy. Suppose further that C has contracted to sell the identical services to A and is ready, willing, and able to perform. Because of the contract between C and A, 211(c)(2) would prohibit us from ordering C to wheel energy from B to A. If, however, A terminated its contract (and applicable rate schedule) with C, 211(c)(2) would cease to apply. Subsection 211(c)(1) would then come into play. But, as we said in Opinion No. 198, 25 FERC at 61,536, because such sales are usually incidental to a utility's main business, 211(c)(1) would most likely not prohibit us from ordering C to wheel.

It is difficult to know what to make of this argument. If SEPA is arguing that subsection 211(c)(1) provides no limitation on the issuance of a wheeling order once a contract ends or for energy that is in excess of the amount currently provided under a rate schedule, the argument is simply wrong. Subsection 211(c)(1) obviously provides some limitation. 15/

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15/ SEPA cites several passages from the conference Committee deliberations to support its argument. None of these, however, contradicts our interpretation of subsection 211(c)(1).

In the first Rep. Dingell said that "when contracts for the sale of power are up, it has not been explained to me why the buyer should not be able to cast around to get the power that he would have gotten under the best terms for himself." Transcript of the Joint Conference on Energy, November 18 and 28, 1977, at 2814 [hereinafter cited as Joint Conference Proceedings]. This sounds damaging. But it is not. Rep. Dingell was here justifying the House conferees' wheeling offer, which did not protect a utility against the pirating of its wholesale customers after their contracts expired. Since the House conferees' offer did not contain provisions similar to subsections 211(c)(1) and (c)(2), Rep. Dingell's argument does not bear on the interpretation of these subsections.

The second passage involves a brief exchange between Rep. Dingell and Sen. Johnston concerning the provision in the Senate conferees' offer that became subsection 211(c)(1). After Sen. Johnston explained that the preservation of existing competitive relationships was not a reason for ordering wheeling, but was a negative test that overrides the positive tests of subsection 211(a), Rep. Dingell said, "I don't think that what you're saying here would indicate we're trying to discourage competition." Sen. Johnston agreed, and, with that, Rep. Dingell said that he had no objection to the provision. Id. at 2844-46.

We do not see how this exchange contradicts our interpretation of subsection 211(c)(1). As we explained in Opinion No. 198, 25 FERC at 61,538-39, although subsection 211(c)(1) prohibits the Commission from using subsection 211(a) to remedy relationships that are anticompetitive under the antitrust laws, this is not to be taken as legislative approval of those relationships. Though it is difficult to make much of such a brief exchange, we think this is all Rep. Dingell and Sen. Johnston are saying here.

[FOOTNOTE CONTINUES ON FOLLOWING PAGE.]

That limitation cannot be ignored. If, however, SEPA is arguing that subsection 211(c)(2) shows that subsection 211(c)(1)

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15/ [FOOTNOTE CONTINUED FROM PREVIOUS PAGE.]

The third passage is an extended discussion among Rep. Dingell, Rep. Brown, Sen. Johnston, and Sen. McClure. *Id.* at 2855-58. Far from contradicting our interpretation of subsections 211(c)(1) and (c)(2), this discussion supports it.

The subject of the discussion was the provision of the Senate conferee's wheeling offer that became subsection 211(c)(2). The intent behind this provision was explained by Sen. Johnston as follows:

> [L]et's say that a utility has contracted to provide a city with all the power that city needs, and is willing, ready, and able to provide the power, but the city wants to break that contract and buy it from someone else.
>
> Now, if you have an existing contract ... of that sort[,] then you shouldn't be able to break that contract in order to wheel the excess power to the city.

*Id.* at 2853.

The provision, however, was drafted in such a way that it would continue to prohibit wheeling to replace an amount of energy provided under the contract even after the contract expired. *See id.* at 2022, 2831, and 2847. Rep. Dingell pointed this out. He did not think that anyone should be "chained" to a contract that had expired because that might not be in the interest of either the buyer or seller. *Id.* at 2854. Sen. McClure then explained that the intent of the provision was not to tie buyers to their expired contracts. *Id.* 2857. But he added that it was not the intention of the Senate conferees by adding the provision that became 211(c)(2) "to indicate that once a current contract runs out that then that market is subject to whatever competitive conditions may prevail." *Id.* at 2856. *See also id.* at 2857.

[FOOTNOTE CONTINUES ON FOLLOWING PAGE.]

cannot be interpreted as providing an absolute bar to the issuance of a wheeling order, we agree. But we have not so interpreted 211(c)(1).

V.

In Opinion No. 198 we considered the Cities' argument that our interpretation of subsection 211(c)(1) would be inconsistent with the procompetitive purpose of subsection 211(a). Based on an analysis of the statute and its legislative history we concluded that subsection 211(a) had no such purpose. 16/ SEPA does not dispute this conclusion. 17/ But it argues

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15/ [FOOTNOTE CONTINUED FROM PREVIOUS PAGE.]

SEPA contends that at this point in the discussion Rep. Dingell refused to agree with Sen. McClure about what would happen after contracts expire. We, however, are unable to see any disagreement expressed by Rep. Dingell. (Indeed, just before Sen. McClure gave his views, Rep. Dingell said that, although he objected to the way the Senate conferee's had drafted the provision, he was "not advocating somebody be able to run in and make sales to a utility which has previously been served by another utility -- and then cause the prior supplier to wheel that power reluctantly to the buyer." *Id.* at 2856.) Instead, what happened after Sen. McClure spoke was that Sen. Johnston suggested some revised language to resolve the dispute. *Id.* at 2857-58. As modified, the provision would absolutely prohibit wheeling that would replace power provided under a contract but would not apply after the contract expires. Rep. Dingell had no objection to this. *Id.* at 2858.

Rep. Brown then asked whether customers could obtain wheeling to leave their supplier after the supplier had built capacity to serve them. *Id.* at 2858-59. Sen. Johnston stated that this situation would not be covered by the provision that became subsection 211(c)(2) but would be covered by the "'existing competitive relationship' clause." *Id.* at 2859-60.

16/ 25 FERC at 61,536-39.

17/ The Cities dispute it though. But the Cities do not challenge our analysis of the statute or its legislative history. Hence we need not repeat that analysis here.

that in interpreting 211(c)(1) we have confused the lack of procompetitive purpose with the procompetitive effect of wheeling orders. According to SEPA, we concluded that, because the purpose of 211(a) was not to promote competition, the effect of promoting competition bars the issuance of a wheeling order even when the order's purpose would be to conserve energy, promote efficiency, or improve reliability.

SEPA would have a point if all we had to go on were statements that the purpose of 211(a) was not to promote competition. But that is not all we have. The statute itself in 211(c)(1) prohibits the issuance of wheeling orders that have a significant procompetitive effect. This subsection provides that even if the order would conserve energy, promote efficiency, or improve reliability, no order may be issued if existing competitive relationships are not reasonably preserved. As Senator Jackson explained, "the statute sanctions Federal action where the energy conservation and management purposes of the act are furthered but does not permit the Federal Government to involve itself, under authority of the act, on one side or the other of the economic contests among utilities for customers." 18/

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18/ 124 Cong. Rec. S17528 (daily Ed. Oct. 7, 1978) (emphasis added). See also Opinion No. 198, 25 FERC at 61,530 and n.9.

The statements from the conference committee deliberations SEPA cites are not to the contrary. One is a statement of Rep. Sharp (whom SEPA refers to as Rep. Dingell). Joint Conference Proceedings at 2820. This statement was an explanation of the House Conferees' wheeling offer. Since this offer contained no language similar to 211(c)(1), it has no bearing on our interpretation.

The other statement is that of Rep. Dingell. Id. at 2745-46. In Opinion No. 198, 25 FERC at 61,535, we quoted the part of this statement in which the Congressman said that he had no objection to protecting a utility against the loss of wholesale customers. SEPA points out that Rep. Dingell concluded his statement with the following words: "subject to the caveat that we have arrived at, that the action should, wheeling I am referring to now,

[FOOTNOTE CONTINUES ON FOLLOWING PAGE.]

## VI.

In Opinion No. 198 we cited a publicly available, though unpublished, transcript of the conference committee deliberations to support our interpretation of subsection 211(c)(1). 19/ The Cities contend that this was improper. The contention is frivolous.

Our inquiry into the meaning of 211(c)(1) began with the conference committee report. That document showed that it was "probable" that Congress intended for us to conduct an inquiry narrowly-focused on the competitive relationships the

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18/ [FOOTNOTE CONTINUED FROM PREVIOUS PAGE.]

provide proper utilization and conservation of natural resources." SEPA does not explain how this additional language contradicts our interpretation of 211(c)(1). And we do not see how it does. All the additional language adds is that for a wheeling order to be even considered, it must conserve energy, promote efficiency, or improve reliability.

19/ The transcript is in the possession of Senate Committee on Energy and Natural Resources. The Committee makes the transcript available at its office for review by the public. The public may take notes on the transcript and quote from them. The Committee, however, does not provide copies of the transcript to the public.

In this case a copy of the transcript was somehow obtained by Kentucky, who gave a copy to SEPA. SEPA, in turn, offered copies to counsel for our staff, who accepted the copy, and to counsel for the Cities, who did not.

In preparing Opinion No. 198 we used the copy SEPA gave to our staff. The Cities contend that, because the copy came from Kentucky, there is no certainty that the copy we used is authentic. This contention hardly merits attention. Because the Senate Committee makes the transcript available to the public, the Cities could have compared the portions of the transcript we quoted with the transcript in the Committee's office and pointed out any discrepancies. That the Cities have pointed to no such discrepancies suggests there is no problem. Nevertheless, we have compared our copy with the Committee's transcript. Our copy is but a xerographic reproduction of the original.

selling and wheeling utilities have towards the buying utility. 20/ Only after reaching this conclusion did we turn to the transcript. 21/ It "confirmed" our interpretation. 22/ But that is all it did. Our interpretation would be the same even if there were no transcript. Fortunately, however, there is. It tells us what the legislators had in mind. 23/ In any

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20/ 25 FERC at 61,632-33.

21/ Id. at 61,534-36.

22/ 25 FERC at 61,533.

23/ The Cities contend that the transcript cannot be used to determine Congress's intent because, unlike the conference report, it was not presented to Congress as a whole when it considered the conference committee's bill. This argument is not persuasive. Sections 211 and 212 were a compromise of the different provisions of the House and Senate versions of the Public Utility Regulatory Policy Act. Since the compromise was made by the conference committee we need to know what the conferees wanted the statute to do and why they wanted the statute to do that to interpret subsection 211(c)(1) properly. See 25 FERC at 61,634. The conference report provides a brief summary of what the conferees wanted the statute to do. But the transcript is a record of the statements of the conferees themselves in unrestrained conversation in meetings open to the public and press, exploring their differences and explaining their agreement. In these circumstances the transcript is not just relevant, it is highly probative of Congress's intent. This point was recognized, albeit in a slightly different context, long ago:

> It is of course true that members who vote upon a bill do not all know, probably very few know, what has taken place in committee. On the most rigid theory possibly we ought to assume that they accept the words just as the words read, without any background of amendment or other evidence as to their meaning. But the courts have come to treat the facts more really; they recognize that while members deliberately express their personal position upon the general purposes of the legislation, as to the details of its articulation they accept the work of the committees; so much they delegate because legislation could not go on in any other way.

S.E.C. v. Robert Collier & Co., 76 F.2d 939, 941 (2d Cir. 1935) (L. Hand, J.).

event we see nothing improper in our using the transcript. The courts look to material of this type when they seek "to discover the design of the legislature...." 24/ And we can conceive of no hypothesis on which administrative agencies can be deemed disabled from following the judiciary's example. Such a rule would be absurd. It would mean that we are not free to consult this transcript when we construe the statute, but that courts can study it when they pass on the correctness of our interpretation. 25/

## VII.

We have considered the other arguments advanced by SEPA and the Cities. But we find nothing in them that warrants a change in Opinion No. 198. It is, however, appropriate to correct a typographical error in Opinion No. 198 that may cause confusion. The reference to "subsection 211(c)(1)" in the sentence beginning on line 11 of page 61,537 of 25 FERC Reports should be changed to "subsection 211(a)". 26/

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24/ United States v. Fisher, 6 U.S. (2 Cranch) 358, 386 (1805) (Marshall, C.J.).

For cases in which courts have relied on unpublished transcripts, see, e.g., Bryan v. Itasca County, 426 U.S. 527, 536 (1976) (unpublished transcript of hearing); Nevada Power Co. v. Watt, 711 F.2d 913, 922-24 (10th Cir. 1983) (unpublished conference committee transcript); Borrell v. U.S.I.C.A., 682 F.2d 981, 988 (D.C. Cir. 1982) (unpublished transcript of Senate committee markup session); Wren v. Merit System Protection Bd., 681 F.2d 867, 873 (D.C. Cir 1982) (unpublished transcript of Senate committee markup session); and Sierra Club v. Ruckelshaus, 344 F. Supp. 253, 256 (D.D.C. 1972) (unpublished hearing transcript). (Barr Laboratories, Inc. v. Harris 482 F. Supp. 1183, 1185 n.* (D.D.C. 1980), cited by the Cities in an earlier motion to strike references to the transcript, is not to the contrary. In this case the court found the statute to be clear. Hence the court held that there was no need to allow discovery of unpublished government documents. The case is thus but another application of the traditional doctrine that when the statute is clear, resort to its legislative history is unnecessary.)

25/ See Wald, Some Observations on the Use of Legislative History in the 1981 Supreme Court Term, 68 Iowa L. Rev. 195, 202 (1983).

26/ In the slip opinion the typographical error occurs on line 2 of page 18.

The Commission orders:

(A) The opinion of the Commission, issued on November 8, 1983, in this docket is amended by striking "subsection 211(c)(1)" on line 11 of page 61,337 of 25 FERC Reports and inserting in lieu thereof "subsection 211(a)".

(B) The applications for rehearing filed by SEPA and the Cities are denied.

By the Commission.

( S E A L )

Kenneth F. Plumb,
Secretary.

23 FERC ¶61,179

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

ELECTRIC RATES: Wheeling; Discrimination; Summary Disposition

Before Commissioners: C. M. Butler III, Chairman;
Georgiana Sheldon, J. David Hughes,
A. G. Sousa and Oliver G. Richard III.

Wabash Valley Power Association, Inc.
v.
Northern Indiana Public Service Company

Docket No. EL83-4-000

## ORDER DENYING MOTION TO DISMISS, INSTITUTING INVESTIGATION, AND ESTABLISHING PROCEDURES

(Issued May 5, 1983)

On November 3, 1982, Wabash Valley Power Association, Inc. (WVPA) applied to the Commission under Sections 211 and 212 of the Federal Power Act for an order directing Northern Indiana Public Service Company (NIPSCO) to wheel power to twelve WVPA member cooperatives. 1/ WVPA currently purchases firm power for the twelve cooperatives from NIPSCO under an electric tariff on file with this Commission. 2/ However, WVPA states that it notified NIPSCO on July 19, 1982, of its intent to cancel the tariff service agreements as of August 1, 1983, pursuant to the one-year notice provisions contained in those agreements.

In support of its wheeling order request, WVPA alleges that NIPSCO has denied numerous requests and proposals by WVPA for "mutually advantageous power supply arrangements" during the past twelve years, has discriminated against WVPA in violation of the Sherman Act, and has used its monopoly over transmission in WVPA's

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1/ The twelve rural electric membership corporations (REMCs) are Carroll Country REMC, Fulton County REMC, Jasper County REMC, Kankakee Valley REMC, Kosciusko County REMC, LaGrange County REMC, Marshall County REMC, Newton County REMC, Noble County REMC, Steuben County REMC, Warren County REMC, and White County REMC.

2/ FERC Electric Tariff, Third Revised Volume No. 1.

service area to create and maintain anticompetitive control over WVPA. In addition, WVPA alleges that NIPSCO's projected cost of power precludes the company from continuing to supply adequate service to WVPA. For these reasons, WVPA seeks to replace NIPSCO power and energy with other adequate generating resources. WVPA states that its wheeling order request fulfills the requirements of Sections 211 and 212 in that the requested service (1) will not result in a reasonably ascertainable, uncompensated economic loss for NIPSCO, (2) will not place an undue burden on NIPSCO, (3) will not impair the ability of NIPSCO, WVPA, or any other electric utility to render adequate service to its customers, (4) will encourage conservation of energy and capital, (5) will significantly promote the efficient use of facilities and resources, and (6) will improve the reliability of the electric utility systems involved.

Notice of WVPA's application was published in the Federal Register with comments due by December 15, 1982. On December 15, 1982, NIPSCO filed an answer, urging that the Commission summarily dismiss WVPA's application. First, NIPSCO denies that it has refused to make mutually advantageous power supply arrangements with WVPA, and that it has used its position to maintain anticompetitive control over WVPA. NIPSCO claims that its February 27, 1978 agreement to purchase 9% of WVPA's share of Marble Hill nuclear output 3/ completely refutes those allegations.

Second, NIPSCO denies that a single year's notice effects cancellation of the NIPSCO-WVPA service agreements. NIPSCO states that on February 27, 1978, the parties entered into an interconnection agreement under which NIPSCO agreed to supply WVPA's power needs to the extent that they exceed the output generated by WVPA's ownership in the Marble Hill Nuclear Unit No. 1. 4/ Because that agreement requires WVPA to give eleven

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3/ This power supply agreement provides that NIPSCO's purchases of WVPA's Marble Hill entitlement will decrease by 1% in each successive year. Because the agreement is administered by the Rural Electrification Administration, it has not been filed as a jurisdictional rate schedule with the Commission.

4/ The interconnection agreement is not on file with the Commission. The service initiation date coincides with the Marble Hill Nuclear Unit No. 1 in-service date, which lies considerably beyond the 120-day notice requirement specified in 18 CFR § 35.3.

years' notice of intent to replace NIPSCO-supplied power with power generated by other resources, NIPSCO asserts that WVPA's notice could not cancel the existing power contracts, and that the wheeling order sought by WVPA would breach the interconnection agreement. Moreover, NIPSCO contends that such an order is barred by Section 211(c)(2) of the Federal Power Act, which prohibits the Commission from ordering a utility to wheel any amount of power which replaces an amount of power the utility is already required to supply pursuant to a contract or filed rate schedule.

In addition, NIPSCO challenges WVPA's assertion that loss of the WVPA load will cause NIPSCO no undue economic hardship. NIPSCO claims that, based upon WVPA's commitment to purchase supplemental requirements (beyond its share of Marble Hill output) from NIPSCO, the company has made substantial capital investments to ensure adequate service to all of its customers, including WVPA. NIPSCO contends that the company would have modified its construction plans for the Schahfer Unit Nos. 17 and 18 had it known that the WVPA load might be diverted.

Finally, NIPSCO challenges WVPA's assertion that NIPSCO's projected power costs constitute constructive notice that the company is unable to provide adequate service. NIPSCO contends that projected costs are not relevant to the decision whether to order NIPSCO to wheel energy.

On December 30, 1982, WVPA filed a motion to amend its application, in which it proposed alternate grounds for the requested wheeling order, i.e., that NIPSCO's denial of transmission service constitutes undue discrimination in violation of Sections 205 and 206 of the Federal Power Act. In support of this claim, WVPA alleges that it competes with NIPSCO for industrial load, that reduced power costs would enable WVPA to compete more effectively with NIPSCO, that lower cost sources of bulk power supply are currently available to WVPA, but that NIPSCO has prevented WVPA's access to the lower cost power and precluded effective competition by exercising its monopoly power over transmission in the WVPA service area to deny wheeling service to WVPA. In addition, WVPA states that NIPSCO voluntarily agreed to provide another of its wholesale customers, the City of Rensselaer, with the identical wheeling service that WVPA seeks to obtain in this proceeding. Finally, WVPA states that under ¶ 8.6 of the NIPSCO-WVPA interconnection agreement, the agreement itself is not in effect, and therefore its eleven-year notice provision does not bar WVPA's instant application.

On January 28, 1983, NIPSCO answered WVPA's amended application. NIPSCO contends that it does not possess monopoly control over WVPA, that it lacks the ability to exclude competitors, that

it has not foreclosed WVPA from competition with NIPSCO, that it has not discriminated against WVPA, and that it has not prevented WVPA from entering the bulk power supply business. NIPSCO additionally claims that its wheeling service to Rensselaer is distinguishable from the service sought by WVPA in that the Rensselaer wheeling arrangement, unlike that proposed by WVPA, affords NIPSCO time to plan system changes in the event that Rensselaer diverts its load. Finally, NIPSCO notes that were it not for uncontrollable delays in the Marble Hill construction schedule, which prevented implementation of the interconnection agreement, NIPSCO would now be providing the service requested by WVPA's instant application. These delays contributed to NIPSCO's decision to build the Schahfer Unit Nos. 17 and 18. NIPSCO claims that if it now lost WVPA's load, it would have no market for the generation dedicated to WVPA, and would be forced to shift financial responsibility for the excess generating capacity to retail customers.

## Discussion

Initially, we shall deny NIPSCO's request that WVPA's application be summarily dismissed. WVPA has advanced all of the requisite allegations to seek a mandatory wheeling order under Sections 211 and 212 of the Federal Power Act as well as the additional question of undue discrimination. We believe that WVPA's application raises questions of law and fact, including the matter of WVPA's contractual right to obtain power from other sources, which must be resolved on the basis of an evidentiary hearing.

However, we are not convinced that WVPA's allegations of undue discrimination, monopoly power, and anticompetitive behavior may be fully and fairly heard within the confines of a proceeding under Sections 211 and 212 of the Federal Power Act alone. At present, it is not entirely clear whether we may remedy undue discrimination by ordering wheeling. *See Florida Power & Light Co. v. FERC*, 600 F.2d 668, 679 (5th Cir. 1981); *N.Y. State Elec. & Gas Corp. v. FERC*, 638 F.2d 388, 402-403, *cert. denied sub nom. Penn Yan v. N.Y. State Elec. & Gas Corp.*, 454 U.S. 821 (1981); *Richmond Power & Light Co. v. FERC*, 574 F.2d 610, 624 (D.C. Cir. 1978). However, we need not reach that issue at this time. No determination on the scope of potential remedies need be made unless and until specific findings of anticompetitive activities or undue discrimination are made. Because those matters may be best suited to proof under Section 206 of the Federal Power Act, we shall institute a hearing on WVPA's application pursuant to Section 206 as well as Sections 211 and 212 of the Federal Power Act. The burden of proving the present rates, terms or conditions of service unjust, unreasonable, unduly discriminatory or preferential rests with WVPA under Section 206, as does the burden of proving that WVPA is entitled to an order requiring wheeling under Sections 211 and 212.

In the interest of an effective utilization of resources, we shall require that the Section 211/212 portion of this hearing also consider the appropriate rates, terms, and conditions to be incorporated into a proposed wheeling order, if such an order is ultimately found to be appropriate. We believe that this approach will facilitate the negotiations contemplated by Section 212(c) in the event that wheeling is ordered. See Southeastern Power Administration v. Kentucky Utilities Co., 11 FERC ¶ 61,191 (1980). However, in accordance with our past practice, we shall leave to the discretion of the presiding judge whether to phase the Section 211/212 proceeding to allow resolution of the compelled wheeling question prior to consideration of the rate issues. Southeastern Power Administration v. Kentucky Utilities Co., 12 FERC ¶ 61,022 (1980). The Section 211/212 compelled wheeling question should be heard concurrently with the Section 206 discrimination issue.

The Commission orders:

(A) NIPSCO's motion to dismiss WVPA's application is hereby denied.

(B) Pursuant to the authority contained in and subject to the jurisdiction conferred upon the Federal Energy Regulatory Commission by section 402(a) of the Department of Energy Organization Act and by the Federal Power Act, particularly Sections 206, 211, and 212 thereof, and pursuant to the Commission's Rules of Practice and Procedure and the regulations under the Federal Power Act (18 CFR, Chapter I), a public hearing shall be held concerning WVPA's claims of undue discrimination and entitlement to a wheeling order.

(C) A presiding administrative law judge, to be designated by the Chief Administrative Law Judge, shall convene a conference in this proceeding to be held within approximately fifteen (15) days after issuance of this order, in a hearing room of the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, D.C. 20426. The presiding judge is authorized to phase this proceeding as set forth in the body of this order and to establish procedural dates and rule on all motions (except motions to dismiss) as provided in the Commission's Rules of Practice and Procedure.

(D) The Secretary shall promptly publish this order in the Federal Register.

By the Commission.

( S E A L )

Kenneth F. Plumb

Kenneth F. Plumb,
Secretary.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: C. M. Butler III, Chairman;
Georgiana Sheldon and A. G. Sousa.

Central Power and Light Company, )
Public Service Company of Oklahoma, )
Southwestern Electric Power Company, ) Docket Nos. EL79-8
West Texas Utilities Company ) E-9558

## ORDER REQUIRING INTERCONNECTION AND WHEELING, AND APPROVING SETTLEMENT

(Issued October 28, 1981)

On February 9, 1979, four public utilities, Central Power and Light Company, Public Service Company of Oklahoma, Southwestern Electric Power Company and West Texas Utilities Company, jointly filed an application 1/ for (1) exemption from state regulation preventing voluntary coordination of the utilities pursuant to section 205(a) of The Public Utilities Regulatory Policies Act of 1978 and (2) interconnection of facilities and the provision of transmission services pursuant to sections 202, 210, 211, and 212 of the Federal Power Act (Act), as amended. The four utilities are wholly owned subsidiaries of Central and South West Corporation (CSW) and hereafter will be referred to collectively as CSW. CSW requested approval of four synchronous alternating current interconnections between two electric reliability councils, the Electric Reliability Council of Texas (ERCOT) and the Southwest Power Pool (SWPP). The application was opposed by Houston Lighting and Power Company (HLP) and the operating subsidiaries 2/ of the Texas Utilities Company (TUC).

On June 27, 1980, in an attempt to settle, among other things, this proceeding and a related proceeding before the Nuclear Regulatory Commission, Central Power and Light Company filed an amended application seeking approval of two asynchronous direct current interconnections between electric utilities in ERCOT and SWPP. On July 28, 1980, CSW, HLP and TUC submitted an offer of settlement which would effectuate the proposal set forth in the amended application.

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1/ This proceeding had its antecedents in a complaint filed on May 4, 1976, in Central Power and Light Co., Docket No. E-9558, alleging a number of utilities in Texas were public utilities subject to the jurisdiction and interconnection authority of the Commission.

2/ These companies are Dallas Power & Light Company, Texas Electric Service Company, and Texas Power & Light Company.

The offer of settlement has been supplemented on two occasions. The offer first was supplemented by agreement dated September 11, 1980, executed by the Commission staff, CSW, HLP, and TUC, and a supplemental offer of settlement was filed on October 8, 1980. Then on June 22, 1981, a second supplemental offer of settlement was filed, advising the Commission that an agreement had been executed by CSW and the U.S. Department of Justice (DOJ), under which DOJ agreed not to contest the offer of settlement as supplemented by the supplemental offer of settlement and as amended by the second supplemental offer of settlement. The offer of settlement, as supplemented, will hereafter be referred to as the "settlement agreement".

All parties in this proceeding, while reserving their respective positions in the event the settlement agreement is not accepted by the Commission, have either affirmatively joined in the settlement agreement or announced their intention to accept the proposed order without appeal. The administrative law judge certified the settlement agreement to the Commission as an uncontested offer of settlement on July 10, 1981.

The settlement agreement provides among other things that asynchronous interconnections will be installed between ERCOT and SWPP. These would consist of a North Interconnection, to be constructed by CSW, which would consist of two back-to-back direct current terminals with an initial capacity of 200 mw on either side of the ERCOT - SWPP border at Oklaunion, Texas. CSW will also construct an alternating current terminal at the Public Service Company of Oklahoma's power station in Lawton, Oklahoma, and a 345 kw AC transmission line from Lawton to the northern bus of the interconnection at Oklaunion, a distance of some 61 miles. The South Interconnection, to be constructed jointly by CSW and HLP, would consist of a direct current transmission line approximately 153 miles long with terminals having an initial capacity of 500 mw in Walker County, Texas, and at the South Texas Project (STP), a generating plant under construction near Bay City, Texas. Initially, CSW will pay for and be the owner of 100 percent of the North Interconnection. As to the South Interconnection, CSW will pay for and own 60 percent, while HLP will pay for and own the remaining 40 percent.

Other utilities in ERCOT and SWPP have an opportunity to participate in the construction and ownership of the interconnections on the condition that each such party pays its pro rata share of the capital costs of constructing the interconnection in which it wishes to participate and undertakes to pay its pro rata share of the costs of operating and maintaining the interconnection. Furthermore, at maximum intervals of three years from June 30, 1983, to June 30, 2004, other utilities which are members of ERCOT or SWPP will be given an oportunity to participate in planning and ownership of any capacity increases in the interconnections.

As part of their respective filed wheeling rates, CSW and HLP will each reserve 15 percent of the capacity of their respective direct current interconnection facilities for firm power wheeling. This reservation will be made for utilities in ERCOT and SWPP having loads less than 500 mw.

Rates and service will be determined from time to time in accordance with the procedures of sections 205 and 206 of the Act. CSW, HLP, and TUC agree to file rates with the Commission for wheeling power to, from, or over the proposed direct current interconnecting facilities which will roll in each of their alternating and direct current transmission costs with the result that any utility using any of their AC or DC lines for wheeling power in interstate commerce will pay a rate designed to recover all costs and a reasonable return on both the AC and DC investment and related operating costs.

In addition, CSW must, upon request, consult with any entity which owns or operates electric generation or transmission facilities concerning the technical feasibility of any specific alternating current synchronous interconnection between ERCOT and SWPP which is proposed in good faith. This shall include assisting in the formulation and performance of load flow and stability studies and supplying technical and financial information necessary to facilitate the entity's planning of the proposed AC interconnection.

The Commission staff prepared an Environmental Analysis Report concerning the settlement proposal which concluded that the construction and operation of the proposed interconnections, conditioned upon certain construction and reporting requirements designed to mitigate environmental impacts, would not constitute a major federal action significantly affecting the quality of the human environment.

The Commission finds:

(A) The order issued herewith pursuant to section 210 of the Act is in the public interest, will encourage overall conservation of energy and capital, will optimize the use of facilities and resources, and will improve the reliability of each electric utility system to which this order applies.

(B) The order issued herewith pursuant to section 211(a) of the Act is in the public interest, would conserve a significant amount of energy, would significantly promote the efficient use of facilities and resources, would improve the reliability of each electric utility system to which the order applies and would reasonably preserve existing competitive relationships.

(C) The order issued herewith is not likely to result in a reasonably ascertainable uncompensated economic loss for any electric utility affected by the order, nor will it place an

undue burden on, unreasonably impair the reliability of, or impair the ability to render adequate service to customers of, any electric utility affected by the order.

(D) No party subject to this order has incurred or is likely to incur any costs as a result of this order which CSW would be obligated to reimburse under section 212(b) of the Act, except as otherwise ordered herein. The record demonstrates that CSW is ready, willing and able to reimburse each party subject to this order for costs incurred under this order.

(E) The settlement agreement is fair, reasonable and in the public interest and should be approved.

(F) All outstanding material issues in Central Power and Light Co., Docket No. E-9558 are either resolved or rendered moot by this order.

(G) The order issued herewith does not constitute a major federal action that significantly affects the quality of the human environment.

(H) The mitigation and reporting requirements ordered herein mitigate any potential adverse environmental effect to the human environment that could arise from this order.

The Commission orders:

(1) The settlement agreement is approved and adopted by the Commission. CSW, HLP, and TUC shall construct the interconnections and take all actions necessary to implement the settlement agreement.

(2) Central Power and Light Co., Docket No. E-9558, is dismissed with prejudice.

(3)(a) Compliance with this order or any provisions hereof shall not make TUC, any of TUC's operating subsidiaries, HLP, or any other electric utility or other entity a "public utility", as that term is defined by section 201 of the Act, and subject to the jurisdiction of the Commission for any purpose other than for the purpose of carrying out the provisions of sections 210, 211, and 212 of the Act.

(b) Compliance with this order or any provisions hereof shall not make TUC, any of TUC's operating subsidiaries, or HLP subject to the jurisdiction of the Commission for any purpose other than the purposes specified in this order and in the settlement agreement.

(4) Since the parties have already agreed on the terms and conditions upon which this order is to be carried out, including the apportionment of costs between them and the compensation or reimbursement reasonably due to any of them, no proposed order pursuant to section 212(c) of the Act is necessary. The Commission approves the settlement agreement, and pursuant to section 212(e)(2)(A) of the Act, the terms and conditions of that agreement relating to apportionment of costs, compensation and reimbursement are hereby incorporated in this order.

(5) The Commission is advised that this settlement is part of an overall settlement which involves cases and controversies at other agencies and in various courts and that settlement of this case is contingent upon parallel resolution in the other forums, including, but not limited to, Securities and Exchange Commission Admin. Proc. File No. 3-4951. Therefore, in order to accommodate an overall settlement, the Commission will entertain applications for rehearing filed by HLP, TUC, CSW or any other party that challenges this order, and will grant rehearing for further consideration until such time as HLP, TUC, and CSW either file a withdrawal of their respective applications for rehearing or file a notice that the settlement is withdrawn; provided, that until such time as applications for rehearing or the settlement are withdrawn by HLP, TUC, and CSW, the Commission, on its own motion (or motion of any party), after reasonable notice and an opportunity to comment, may withdraw this order and remand the case to the administrative law judge to proceed with the case on the original or amended application filed by CSW.

(6) The agreement between CSW and DOJ attached to the second supplemental offer to settlement is hereby incorporated by reference and approved by the Commission; provided however that no acts undertaken pursuant to the agreement, or this Commission's approval thereof or the incorporation of such agreement herein shall affect in any way the non-jurisdictional status of HLP or TUC provided in this order.

(7) CSW and HLP, and any other owners of the North or South Interconnections shall comply with the mitigation measures contained in the Commission staff's Environmental Analysis Report, dated October 29, 1980, to minimize the impact resulting from construction of the direct current transmission lines.

(8) CSW and HLP, and any other owners of the North or South Interconnections, shall consult with the United States Fish and Wildlife Service, the Texas Parks and Wildlife Department and the Texas State Historical Preservation Office in order to determine environmental guidelines appropriate to reasonably mitigate any potential adverse effect to the quality of the human environment that could arise from this order.

(9) No less than 90 days prior to the commencement of construction of each of the North and South Interconnections, the environmental guidelines determined for such interconnection pursuant to paragraph 8, supra, shall be submitted by the owner(s) to this Commission's Division of Environmental Analysis and to the Commission's Ft. Worth regional engineer. This report shall include the final right of way identified for the North and/or South Interconnections and shall identify the environmental guidelines adopted to reasonably mitigate any adverse effects to the quality of the human environment. Thereafter, until each interconnection is operational, annual reports shall be submitted by the owner(s) showing that the environmental guidelines have been observed.

By the Commission.

( S E A L )

Kenneth F. Plumb

Kenneth F. Plumb,
Secretary.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Central Power and Light Company, )
Public Service Company of Oklahoma, ) Docket Nos. EL79-8
Southwestern Electric Power Company,) E-9558
West Texas Utilities Company )

## ERRATA NOTICE

(November 5 , 1981)

## ORDER REQUIRING INTERCONNECTION AND WHEELING, AND APPROVING SETTLEMENT

(Issued: October 28, 1981)

1. Add footnote 3 to page 2, paragraph 2, at the end of sentence 1:

> 3/ On October 9, 1981, the Oklahoma Municipal Power Authority filed a petition to intervene and a motion to file comments out of time. On October 22, 1981, the Authority, after negotiating an agreement with CSW for participation in joint generating projects, filed notice of withdrawal of its intervention and now supports the proposed settlement.

2. Substitute the following corrected ordering paragraphs on pages 4, 5 and 6 of the order beginning after "The Commission orders:"

(1) The Oklahoma Municipal Power Authority's request to withdraw its Petition to Intervene is granted.

(2) The settlement agreement is approved and adopted by the Commission. Pursuant to Sections 210 and 211 of the Federal Power Act, CSW and HLP are hereby required to construct or cause to be constructed the necessary facilities to effect the interconnections as described in or consistent with the settlement agreement; HLP, TUC and CSW are hereby required to interconnect with each other and to wheel, transmit, sell, coordinate, commingle and exchange electric power as set forth in or consistent with the settlement agreement; and CSW, HLP and TUC are hereby required to take all further actions necessary to implement the settlement agreement.

(3) Central Power and Light Co., Docket No. E-9558, is dismissed with prejudice.

(4)(a) Compliance with this order or any provisions hereof shall not make TUC, any of TUC's operating subsidiaries, HLP, or any other electric utility or other entity a "public

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utility", as that term is defined by section 201 of the Act, and subject to the jurisdiction of the Commission for any purpose other than for the purpose of carrying out the provisions of sections 210, 211, and 212 of the Act.

(b) Compliance with this order or any provisions hereof shall not make TUC, any of TUC's operating subsidiaries, or HLP subject to the jurisdiction of the Commission for any purpose other than the purposes specified in this order and in the settlement agreement.

(5) Since the parties have already agreed on the terms and conditions upon which this order is to be carried out, including the apportionment of costs between them and the compensation or reimbursement reasonably due to any of them, no proposed order pursuant to section 212(c) of the Act is necessary. The Commission approves the settlement agreement, and pursuant to section 212(c)(2)(A) of the Act, the terms and conditions of that agreement relating to apportionment of costs, compensation and reimbursement are hereby incorporated in this order.

(6) The Commission is advised that this settlement is part of an overall settlement which involves cases and controversies at other agencies and in various courts and that settlement of this case is contingent upon parallel resolution in the other forums, including, but not limited to, Securities and Exchange Commission Admin. Proc. File No. 3-4951. Therefore, in order to accommodate an overall settlement, the Commission will entertain applications for rehearing filed by HLP, TUC, CSW or any othr party that challenges this order, and will grant rehearing for further consideration until such time as HLP, TUC, and CSW either file a withdrawal of their respective applications for rehearing or file a notice that the settlement is withdrawn; provided, that until such time as applications for rehearing or the settlement are withdrawn by HLP, TUC, and CSW, the Commission, on its own motion (or motion of any party), after reasonable notice and an opportunity to comment, may withdraw this order and remand the case to the administrative law judge to proceed with the case on the original or amended application filed by CSW.

(7) The agreement between CSW and DOJ attached to the second supplemental offer to settlement is hereby incorporated by reference and approved by the Commission; provided however that no acts undertaken pursuant to the agreement, or this Commission's approval thereof or the incorporation of such agreement herein shall affect in any way the non-jurisdictional status of HLP or TUC provided in this order.

(8) CSW and HLP, and any other owners of the North or South Interconnections shall comply with the mitigation measures contained in the Commission staff's Environmental Analysis Report, dated October 29, 1980, to minimize the

impact resulting from construction of the direct current transmission lines.

(9) CSW and HLP, and any other owners of the North or South Interconnections, shall consult with the United States Fish and Wildlife Service, the Texas Parks and Wildlife Department and the Texas State Historical Preservation Office in order to determine environmental guidelines appropriate to reasonably mitigate any potential adverse effect to the quality of the human environment that could arise from this order.

(10) No less than 90 days prior to the commencement of construction of each of the North and South Interconnections, the environmental guidelines determined for such interconnection pursuant to paragraph 8, *supra*, shall be submitted by the owner(s) to this Commission's Division of Environmental Analysis and to the Commission's Ft. Worth regional engineer. This report shall include the final right of way identified for the North and/or South Interconnections and shall identify the environmental guidelines adopted to reasonably mitigate any adverse effects to the quality of the human environment. Thereafter, until each interconnection is operational, annual reports shall be submitted by the owner(s) showing that the environmental guidelines have been observed.

Kenneth F. Plumb
Secretary

In Reply Refer To:
Docket No. EL83-4-000

Wise & Weinberg
Attention: Robert Weinberg, Esq.
1201 Connecticut Avenue, N.W.
Washington, D.C. 20036

JUL 3 1984

Dear Mr. Weinberg:

On April 19, 1984, you filed on behalf of Wabash Valley Power Association, Inc. (WVPA) a settlement agreement between WVPA and Northern Indiana Public Service Company in the above-referenced docket. On May 2, 1984, staff submitted comments in support of the settlement. No other comments were received. On May 24, 1984, the presiding administrative law judge certified the uncontested settlement to the Commission.

The subject settlement is in the public interest and is hereby approved. The settlement contains an Interconnection Agreement which will be designated when it is submitted for filing. The Commission's approval of this settlement does not constitute approval of, or precedent regarding, any principle or issue in this proceeding.

Since wholesale rates were not at issue, and no refunds are required, Docket No. EL83-4-000 is hereby terminated.

By direction of the Commission.

Secretary

30 FERC ¶61,229

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

ELECTRIC RATES: Wheeling; Hearing

Before Commissioners: Raymond J. O'Connor, Chairman;
Georgiana Sheldon, A. G. Sousa,
Oliver G. Richard III and Charles G. Stalon.

City of Manti, Utah )
)
v ) Docket No. EL85-12-000
)
Utah Power & Light Company )

## ORDER SETTING FOR HEARING APPLICATION FOR WHEELING AND INTERCONNECTION AND ESTABLISHING PROCEDURES

(Issued March 4, 1985)

On November 26, 1984, the City of Manti, Utah (Manti) filed an application, pursuant to sections 211 1/ and 212 2/ of the Federal Power Act (FPA), for a Commission order directing Utah Power & Light Company (UP&L) to provide transmission service to the city on a long term basis commencing on February 4, 1986. In the alternative, Manti requests that UP&L be directed to provide transmission service until such time as the city constructs its own transmission facilities or alternative transmission facilities become available. In addition, Manti requests that the Commission direct UP&L to interconnect its transmission facilities with the city pursuant to section 210 of the FPA, 3/ if such an interconnection is necessary to implement a wheeling order.

Manti owns and operates facilities for the distribution of electric power and energy at retail. It purchases power at wholesale from UP&L and the Western Area Power Administration's Colorado River Storage Project. In February 1981, UP&L gave Manti notice of its intent to terminate service under its present agreement with the city, effective February 4, 1986. The city has explored alternative power supply arrangements and has purportedly identified at least two prospective power suppliers for the period beginning

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1/ 16 U.S.C. § 824j.

2/ 16 U.S.C. § 824k.

3/ 16 U.S.C. § 824i.

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Docket No. EL85-12-000 - 2 -

on February 4, 1986; however, Manti states that it cannot finalize any alternative arrangements until it obtains assurances from UP&L that wheeling of such power is available. The city requested such assurances by letter dated September 13, 1984. UP&L responded by letter dated October 4, 1984, but, according to Manti, gave no assurance as to its willingness to provide transmission service to the city under fair and reasonable terms at compensatory rates. 4/ Manti goes on to state that its application would meet the requirements for wheeling and interconnection orders set forth in sections 210, 211, and 212 of the Federal Power Act.

Notice of Manti's application appeared in the Federal Register, 5/ with comments due on or before January 10, 1985. On December 21, 1984, UP&L filed an answer and motion to dismiss Manti's application. In support, UP&L contends that: it is willing to enter into a new resale or transmission agreement with the city; additional information from Manti as to the specifics of any alternative power supply arrangement is needed in order for UP&L to respond to the city's inquiry regarding transmission; UP&L has advised Manti of its position; and, finally, Manti has made no effort to provide UP&L with the needed information. In the circumstances, UP&L contends, Manti's application does not meet the statutory standards for obtaining wheeling orders; 6/ accordingly, Manti's application is premature and should be dismissed.

On January 21, 1985, Manti filed an answer in opposition to UP&L's motion to dismiss. Manti contends that it is prepared to demonstrate at a hearing that UP&L's course of conduct amounts to an actual or constructive refusal to wheel, and, therefore, disputed issues of fact exist which can only be determined after an evidentiary hearing.

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4/ The letters are attached as Exhibits C & D to Manti's application.

5/ 49 Fed. Reg. 48796 (1984).

6/ In particular, UP&L states that Manti's application does not comply with section 211(b)(1), 16 U.S.C. § 824j(b)(1), which provides that the Commission may issue an order requiring wheeling by an electric utility if the utility has given actual or constructive notice that it is unwilling or unable to provide electric service to the applicant.

On February 8, 1985, Manti filed a petition, pursuant to Rule 207 of the Commission's Rules of Practice and Procedure, 7/ requesting that the Commission designate the presiding administrative law judge in Utah Power & Light Co., Docket Nos. ER-571-000, et al., to hear its application for wheeling. In support, Manti notes that, before the Commission can issue a wheeling order, it must find that the city is ready, willing, and able to pay UP&L the costs of transmission service and a reasonable rate of return on such costs, as required by section 212(b) of the Federal Power Act; 8/ and that UP&L's cost of transmission service and required rate of return are issues pending in Docket Nos. ER84-571-001, et al. 9/ The appointment of a single administrative law judge to preside over both dockets would, Manti alleges, avoid unnecessary duplication of efforts and expenditure of resources. Manti does not request consolidation of the proceedings at this time, however, stating that its application in Docket No. EL85-12-000 raises issues unique to this docket alone.

On February 15, 1985, UP&L filed a protest to Manti's petition for special assignment of an administrative law judge. The company states that the issues pending in Docket Nos. ER84-571-000, et al. are unrelated to those present in this docket, and that assigning the same administrative law judge to both proceedings would frustrate, rather than serve, the interests of judicial efficiency.

### Discussion

As previously indicated, UP&L requests that Manti's application be dismissed on the ground that the utility has not refused to provide electric service, a finding necessary to the issuance of any order pursuant to section 211(b) of the Federal Power Act. 10/ However, Manti has applied pursuant to both section 211(b) and 211(a), which has no such requirement. We shall therefore deny UP&L's motion to dismiss Manti's application on this ground.

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7/ 18 C.F.R. § 385.207 (1984).

8/ 16 U.S.C. § 824k(b).

9/ By order dated January 11, 1985, the Commission, inter alia, accepted for filing UP&L's proposed increase in rates for transmission service to various customers and ordered a hearing as to their justness and reasonableness. Utah Power & Light Co., 30 FERC ¶ 61,015 (1985).

10/ Although not clear from their pleadings, it appears that Manti and UP&L have, with respect to the issue of whether the criteria set forth in section 211(b) have been met, focused upon the company's willingness to provide transmission service. Section 211(b), however, refers to an electric

(Footnote continued on the next page.)

While denying UP&L's motion to dismiss, we agree that more specific information from Manti about alternative power supply arrangements would be necessary to enable us to make the findings required by sections 210, 211, and 212 of the Federal Power Act to issue an order providing for interconnection and wheeling. We shall set Manti's application for hearing, as provided by sections 210 and 211 of the Federal Power Act. However, in order for such a hearing to go forward, Manti must come forth with specific information regarding alternate power supply and transmission arrangements and the transmission it requires, as described in Attachment A. 11/

Our rules of practice do not specifically provide that utilities which are the target of an application under sections 210, 211, and 212 automatically become parties to a hearing on the application. Since UP&L is clearly a necessary party to this inquiry, we shall designate UP&L as a party-respondent to this proceeding, pursuant to Rule 102 of the Commission's Rules of Practice and Procedure. 12/

Finally, we shall deny without prejudice Manti's request to assign this docket to the presiding administrative law judge currently assigned to hear Docket Nos. ER84-571-001 et al. While we share the city's desire to avoid unnecessary duplication of resources, we believe that the parties and the presiding judge to be appointed by the Chief Administrative Law Judge are in the best position to determine how such duplication may be minimized, such as through incorporation by reference of portions of the record in Docket Nos. ER84-571-001, et al., or other procedures.

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10/ (Footnote continued from the previous page.)

utility's unwillingness or inability to provide electric service, not transmission service. Although UP&L has used the term "electric service," it has chiefly discussed its' willingness to provide transmission service. Because the pleadings reflect a misunderstanding of the statutory criteria on this point, we shall not, at this time, dismiss Manti's application for a hearing under section 211(b).

11/ We note that, in the future, failure to provide similar information may result in rejection of an application as deficient.

12/ 18 C.F.R. § 385.102 (1984).

The Commission orders:

(A) UP&L's motion to dismiss Manti's application is denied.

(B) UP&L is hereby designated a party-respondent to this proceeding.

(C) Pursuant to the authority contained in and subject to the jurisdiction conferred upon the Federal Energy Regulatory Commission by section 402(a) of the Department of Energy Organization Act and by the Federal Power Act, particularly sections 210, 211, and 212 thereof, and pursuant to the Commission's Rules of Practice and Procedure and the regulations under the Federal Power Act (18 C.F.R., Chapter I), a public hearing shall be held concerning Manti's application for transmission and interconnection.

(D) A presiding administrative law judge, to be designated by the Chief Administrative Law Judge, shall convene a conference in this proceeding to be held within approximately fifteen (15) days of the date of this order in a hearing room of the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, D.C. 20426. The presiding judge is authorized to establish procedural dates, including the submission of a case-in-chief by Manti, and to rule on all motions (except motions to dismiss) as provided in the Commission's Rules of Practice and Procedure.

(E) The Secretary shall promptly publish this order in the Federal Register.

By the Commission.

( S E A L )

Kenneth F. Plumb
Kenneth F. Plumb,
Secretary.

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## ATTACHMENT A

For each potential power transfer involving the three power suppliers identified by Manti in its application or any other potential supplier, Manti shall provide the following data:

(1) Quantity of Power and Energy

What quantity of power (MW) and energy (MWh) will be wheeled? Manti should include a description of the expected load pattern. For instance, will the power be baseload power to be transmitted at all times or peaking power to be transmitted only during specified hours? How will Manti's take vary under on-peak and off-peak conditions? Will there be seasonal variations in Manti's deliveries?

(2) Point of Receipt

At what point and at what voltage level will UP&L be expected to take delivery of Manti's entitlements? Will the delivery come directly from Manti's supplier or will there be intervening wheeling parties?

(3) Point of Delivery

Where and at what voltage level will UP&L be expected to deliver Manti's entitlement? Does Manti need or require optional delivery points to enhance reliability?

(4) Nature of Entitlement

Does the entitlement provide for firm or nonfirm energy? Is wheeling service to be firm or nonfirm? What degree of firmness is desired?

(5) Contract Term

What is the term of the requested wheeling service and how does this compare with the term of Manti's entitlement?

(6) Scheduling

How does Manti intend to schedule its entitlements? Will Manti schedule a week in advance, the day before, or hourly? Will the energy be scheduled in fixed increments or in variable amounts?

## ATTACHMENT A

(7) Testimony

Manti should provide testimony supporting and explaining all data.

(8) Notice

Manti shall provide the names and addresses of each affected State regulatory authority, each affected electric utility, and each affected Federal power marketing agency so that the statutorily required notice may be given. We note that the Conference Report interprets "affected electric utilities" to include those involved in the sale of power for which wheeling is requested. H. Conf. Rep. No. 95-1750, 95th Cong., 2d Sess. 6, *reprinted in* 1978 U.S. Code Cong. & Ad. News 7797, 7825. *In this instance*, Manti should provide the names and addresses of each potential power supplier.

PURPA Sections 210 and 211

12.Question: Given today's utility environment of practically no construction of central generation facilities and differentials between surplus and deficit regions, do you believe that the section 210 and 211 criteria are adequate?

If you were to suggest any changes, what would they be?

Answer: There has been a significant increase in the volume of coordination transactions among utilities. These types of transactions involve the sale or exchange of electricity between two or more utilities to take advantage of temporary supply or cost differences among utilities or regions of the country. In 1980, purchases of coordination services equalled about 33 percent of sales to ultimate customers of major privately-owned utilities, up from 22 percent in 1963. This dramatic increase in bulk power trade, which relates in part to regional surpluses and deficits of generation capacity, forms the backdrop against which the need for additional transmission services is considered.

Whether the criteria of section 211 of the Federal Power Act are adequate is a function of both this increase in voluntary bulk power transactions as well as the weight one gives to what appear to be competing interests between PURPA and section 211. Specifically, section 2 of PURPA requires a program which, among other things, provides for increased conservation of energy and increased efficiency in the use of facilities and resources. At the same time, section 211(c)(1) prohibits the issuance of a wheeling order under section 211 unless the Commission determines that such order would reasonably preserve existing competitive relationships.

The Commission has interpreted section 211(c)(1) of the Federal Power Act as protecting the wheeling utility against either the indirect use of wheeling to take away retail customers or the loss of wholesale customers within its service area to other bulk power suppliers. 1/ Therefore, the perceived intent of section 211(c)(1) is to protect the wheeling utility's relations with specific customers from being significantly altered by enforced wheeling.

The issue inherent in applying section 211(c)(1) is that there are very few areas of the country which are not currently served by some public utility. Under those circumstances, it would be unlikely for a wheeling applicant to be or to seek to serve a customer that is not already being served by a public utility. Accordingly, it may be difficult, under the section 211 standard, to draft a wheeling order which does not alter existing competitive relationships in many instances.

However, the Commission has found 2/ that ordering wheeling to alleviate the impact of an oil shortage or to increase coordination among surplus and deficient utilities will probably not significantly alter existing competitive relationships and would not prevent wheeling in the circumstances envisioned by Congress in enacting section 211.

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1/ Southeastern Power Administration v. Kentucky Utilities Company, Opinion No. 198, Docket No. EL80-7-000, 25 FERC ¶ 61,204 at 61,536 and 61,541, n. 36, rehearing denied, 26 FERC ¶ 61,127 (1984). Section 211(c)(4) of the Federal Power Act prohibits an order which provides for wheeling directly to an ultimate consumer.

2/ Southeastern Power, 25 FERC at 61,539.

If Congress wishes to promote wheeling, it may wish to address the competitive and procedural issues raised by the limitation in section 211(c)(1). Removing the section 211(c)(1) limitation may create a negative effect on other customers if utilities are required to wheel and lose customers as a result.* Utilities are required to construct facilities in order to meet anticipated loads. If a utility is compelled to wheel and loses customers as a result, then the utility's ability to pay for plant already constructed or being constructed could be hindered, and the remaining customers would be faced with higher prices in order to make up the difference. Further, the utility would have been required to provide, via wheeling, the means for a competitor to take away its own customers.

No serious problems have arisen to date under section 210 of the Federal Power Act. Of course, we recognize that this may be because there have not been wheeling orders that would enable interconnections to occur.

## Imports of Canadian Hydroelectricity

13a. Question: The potential for increased imports of Canadian hydroelectric power are improving, especially in the Northeast. In general, what do you think the U. S. Government's policies should be towards importation of increased Canadian hydroelectric power? In particular, what do you foresee FERC's role as being?

Answer: Under the Department of Energy Organization Act, the Secretary of Energy has jurisdiction over imports. Accordingly, the FERC has no jurisdiction over the policy affecting the importation of power.

13b. Question: As Chairman of FERC, do you intend to pursue any initiatives in this area?

Answer: Presently, I do not intend to pursue any initiatives related to U. S. policies toward increased importation of Canadian hydroelectric power and energy.

## Regional Electric Power Planning Bill

14 Question: In your testimony before Congressman Ottinger's Subcommittee on Energy Conservation and Power on June 26 last year, you indicated your opposition to H.R. 5766, the Regional Electric Power Planning bill. In particular, two sections of that bill seem objectionable to you:

-- transferring intrastate bulk wholesale rate authority from FERC to the state PUC's;

-- mandatory transmission criteria.

Do you still hold those views? If not, how have they changed?

Answer: As I noted in my June 26, 1984, testimony on H.R. 5766, there were potential problems inherent in each of the three titles of that bill from the perspective of the Federal Energy Regulatory Commission. First, the establishment of regional compacts could ultimately result in inefficiencies and inequities in energy markets. Increasing and potentially conflicting regulatory oversight of resource acquisition could inhibit the optimum operation of the energy resource market. Second, the transfer of certain wholesale jurisdiction from the FERC to the states as prescribed by H.R. 5766 would not reduce the potential for discrimination between wholesale and retail customers. It would appear, in fact, to increase the number of customer classes between which and among which discriminatior might occur. Finally, the provisions of H.R. 5766 would make it easier for states which have entered into a regional compact to obtain an FERC order for mandatory wheeling. The significant difference between the requirements of that bill and those of the Federal Power Act would result in dual standards and procedures for mandatory wheeling. Thus, H.R. 5766 could result in multistate conflicts and have an adverse impact on interstate commerce.
I continue to hold the views expressed in my June 26 testimony before the House Energy Conservation and Power Subcommittee last year.

## Staff Cooperation

15 Question: Would you and your staff be willing to work with myself and my staff as we study this bill and recommend, in your view, the appropriate changes and modifications?

Answer: Yes, we would be happy to provide you and your staff with technical assistance with regard to any proposed legislation.

## QUESTIONS FOR THE RECORD FROM SENATOR JOHNSTON

### FERC Fee Revenue

16a. Question: Your FY 1986 budget request of $95.568 million assumes you will collect $66.077 million in fees, annual charges and other revenues. The FY 1984 budget request of $94.586 million assumed you would collect $60 million in fees. You actually collected $39.928 million. The FY 1985 budget request of $100.677 million assumed again that you would collect $60 million in fees. You project that you will actually collect $41.334 million. This table shows your estimated and actual fees more clearly.

FERC Budget History
(millions of $'s)

| | Request | Appropriation | Fees Assumed | Fees Collected |
|---|---|---|---|---|
| FY 1982 | | $76.177 | | |
| FY 1983 | $ 92.500 | 76.839 1/ | | |
| FY 1984 | 94.582 | 89.586 2/ | $60.000 | $39.928 |
| FY 1985 | 100.677 | 95.677 3/ | 60.000 | 41.334 |
| FY 1986 | 95.568 | | 66.077 | |

1/ Plus $9.3 million from DOE and EIA
2/ Plus $1.731 million supplemental
3/ Plus $1.627 million supplemental

Is this year's assumption that you will collect over $66 million any more realistic than the erroneous assumptions of years past?

Answer: In FY 1986 over $51 million of estimated revenue will be derived from present legislative authority or from rules already in place. The difference in revenues will be from enactment of the proposed annual charges legislation, which will account for approximately $10 million, and $5 million, which will be derived from proposed rulemakings to be considered by the Commission.

16b. Question: Why did you make the assumption?

Answer: This assumption is based upon enactment by the Congress of the proposed annual charges legislation and implementation of the additional fee rulemakings.

16c. Question: Why are you willing to continue to live with the fiction that two-thirds of your budget will come from fees, when in fact closer to 40 percent comes from fees?

Answer: We have made, and will continue to make, an effort to implement a reasonable fee structure on our regulated companies. If Congress enacts the Commission's proposed annual charges legislation, which is to be submitted later this year to Congress, and the Commission issues new fee rules, our estimate of revenues will be realized.

## Take Or Pay Liabilities

17a. Question: Last Congress this Committee spent a great deal of time on natural gas legislation. One of the issues before us was whether the pipelines needed statutory relief from take-or-pay liabilities. Now most people tell us that the take-or-pay problem is being settled voluntarily by negotiations among the affected parties.

Last year you provided us with a table showing that 15 interstate pipelines had included some $700 million in prepayments in their rates. That $700 million was in marked contrast to billions of dollars in potential liabilities.

Based upon filings to date at the Commission, what was the extent of actual prepayments for gas not taken made to date by pipelines under your jurisdiction in 1983? In 1984? What do the filings show for 1985?

17a. Answer: As of December 21, 1983, the total gas prepayments outstanding amounted to $1,136,325,010. The amounts attributable to each of the major interstate pipeline companies are shown on the attached table. The source of this information was the annual reports filed by the major Class A and B pipeline companies on FERC Form 2 for calendar year 1983. Since the annual reports for 1984 are not due until April 30, 1985, comparable data are not presently available for calendar year 1984. However, at such time as the data becomes available, we will be happy to compile and supply the data to the Committee.

The question refers to a study made in 1984 as to the amount of prepayments actually reflected in pipeline rates. The study showed an amount of $700 million, the effects of which were included in pipeline rates as of February 1984. The study also showed that many pipeline companies had estimated much greater potential take-or-pay exposure. It is estimated that the total take-or-pay amount reflected in pipeline rates has not significantly changed from the amount reflected in the earlier study, but take-or-pay exposure has changed somewhat and should continue to change. Pipeline companies have been able to resolve some of their take-or-pay exposure for prior periods as demonstrated by the attached press release by Panhandle Eastern Corporation. However, there has been very little indication that they have been successful in resolving future potential obligations. Any success in reducing or eliminating these future obligations will depend upon contract renegotiations. Since these renegotiations are currently taking place, it would be premature to estimate their success or failure. However, with increased competition, take-or-pay should have much less utility for both buyers and sellers.

17b. Question: What do the filings made to date by pipelines under your jurisdiction show for potential liabilities?

17b. Answer: I believe my response to the first part of this question answers the potential liability question posed here.

## Gas Prepayments Under Purchase Agreements
## Balances For The Year Ending December 31, 1983
## Source - FERC Form No. 2

| Company | Amount |
|---|---|
| Alabama-Tennessee Natural Gas Company | $ 4,795,282 |
| ANR Pipeline Company | 190,199,593 |
| Arkansas Louisiana Gas Company (Arkla, Inc.) | 677,850 |
| Colorado Interstate Gas Company | 30,987,142 |
| Columbia Gas Transmission Corporation | 13,599,284 |
| East Tennessee Natural Gas Company | 6,068,019 |
| Eastern Shore Natural Gas Company | 573,012 |
| El Paso Natural Gas Company | 6,008,620 |
| Enserch Corporation | 22,169,481 |
| InterNorth, Inc. (Northern Natural) | 86,077,256 |
| Interstate Power Company | 1,358,558 |
| Iowa-Illinois Gas and Electric Company | 10,560,528 |
| KN Energy, Inc. | 4,759,727 |
| Mid-Louisiana Gas Company | 4,269 |
| Mid-Western Gas Transmission Company | 211,386,363 |
| Mississippi River Transmission Corporation | 248,558 |
| Montana-Dakota Utilities Company | 1,858,503 |
| National Fuel Supply Corporation | 37,407 |
| National Fuel Gas Distribution Corporation | 2,274,954 |
| Natural Gas Pipeline Company of America | 54,792,657 |
| Northwest Central Pipeline Corporation | 43,753,074 |
| Northwest Pipeline Corporation | 9,417,365 |
| Orange & Rockland Utilities | 1,796,486 |
| Panhandle Eastern Pipe Line Company | 8,654,343 |
| Southern Natural Gas Company | 149,329,428 |
| Tenneco, Inc. | 106,627,248 |
| Texas Eastern Transmission Corporation | 5,766 |
| Transco Gas Supply Company | 23,191,046 |
| Transcontinental Gas Pipe Line Corporation | 93,249,549 |
| Transwestern Pipeline Company | 670,122 |
| Trunkline Gas Company | 38,269,532 |
| Union Light, Heat and Power Company | 9,868,795 |
| United Cities Gas Company | 2,096,031 |
| United Gas Pipe Line Company | 439,295 |
| Western Gas Interstate Company | 519,867 |
| Total Gas Prepayments Under Purchase Agreements | $1,136,325,010 |

## Oil Pipeline Rate Regulation

18. Question: FERC inherited a longstanding oil pipeline rate case from the ICC in 1977. The case languished at FERC until the Commission was ordered by the District of Columbia Court of Appeals to issue a decision or to be held in contempt. The decision was issued by FERC on November 30, 1982. The FERC decision was appealed and was reversed by that same court on March 9, 1984 (Farmers Union Central Exchange v. FERC, 784 F.2d 1486, D.C. Cir., March 9, 1984). The court directed the Commission to issue a new decision by next week. Will you meet the court's latest deadline?

18. Answer: In response to your inquiry it seems appropriate to put this case in context by providing the relevant background before turning to your specific inquiry.

I. The Commission assumed jurisdiction over oil pipelines in 1977 as part of the Department of Energy Organization Act. At that time, the Williams case was pending in the Court of Appeals on appeal from the ICC's approval of the rates. The Court of Appeals remanded the case to the Commission with a mandate to develop "a viable modern precedent for use in future cases." Farmers Union I, 584 F.2d 408, 421 (D.C. Cir. 1978). The Commission in early 1979 assigned the case to an ALJ who divided it into two phases: Phase I to resolve the generic methodology and Phase II to apply the methodology to Williams. Fifty-nine days of hearing were held in late 1979 in Phase I and the Commission heard three oral arguments. Opinion No. 154 (the Phase I decision) was issued on November 30, 1982, in compliance with an earlier Court order giving the Commission to that date to decide the case. The Commission opinion was reversed and remanded on March 9, 1984 in Farmers Union II. The Farmers Union II panel indicated that it expected the Commission to complete the remand "within the next twelve months."

On July 2, 1984 the Commission stayed the Phase II proceeding, and that action spawned the latest round of litigation in the case. In October 1984, Farmers Union, et al. (the complaining shippers) filed a suit in District Court to compel the Commission to proceed with Phase II. That suit was dismissed for lack of jurisdiction (although a related Freedom of Information Act claim remains in the District Court) and refiled in the Court of Appeals (Farmers Union Central Exchange v. FERC, D.C. Cir. No. 84-1560 (filed Nov. 12, 1984)). On January 10, 1985 the Court of Appeals issued a show cause order directing the Commission to explain why its stay of the Phase II proceedings was not a violation of the Farmers Union II mandate. The Commission responded to that order with filings on January 22 and February 8, 1985. On January 25, Farmers Union filed another suit in the Court of Appeals to compel the Commission to issue a Phase I decision. Then on January 31, Farmers Union and Williams filed a proposed settlement agreement with the Commission that would resolve Phase II if accepted. Despite the filing of the proposed settlement, Farmers Union continued to press its mandamus actions in Court. On February 21, 1985 the Court of Appeals issued a series of orders that (1) held the show cause order discharged, (2) dismissed Farmers Union's mandamus petitions conditioned on the Commission's aproval of the proposed settlement of Phase II, and (3) directed the Commission to inform the Court by noon on March 8th of any action the Commission has taken to approve or disapprove the settlement. The Court also indicated that if the

Commission did not issue a Phase I decision by the date specified in Farmers Union II, then Farmers Union could again file for mandamus relief.

II. As this history indicates, the only Court directive to the Commission to act by March 8, 1985 is an order issued by the United States Court of Appeals for the District of Columbia Circuit on February 21, 1985, requiring the Commission to report to the Court by noon on March 8 as to action taken by the Commission with respect to the proposed settlement of Phase II of the Williams Pipe Line Company rate proceeding. Farmers Union Central Exchange, Inc., et al. v. FERC, Nos. 84-1560 and 84-1055 (D.C. Cir. filed Feb. 21, 1985). The Commission approved the settlement on March 7, and so informed the Court on March 8. It thus has fully complied with the Court's order.

In the related order issued also on February 21, the Court dismissed applications for extraordinary relief filed by Farmers Union Central Exchange, Inc., et al., to compel the Commission to issue a decision in Phase I of the Williams proceeding (the phase previously remanded by the Court) by a date certain. In its opinion on the Phase I question, the Court had not specifically directed the Commission to issue a new decision by a date certain, it stated only that the Commission "should be able to issue a new order within the next twelve months." Farmers Union Central Exchange, Inc. v. FERC, 734 F.2d 1486, 1530 (D.C. Cir. 1984).

In its February 21, 1985 order dismissing the request for extraordinary relief as to Phase I, the Court also issued no command to FERC regarding Phase I saying only it "saw no reason to interfere with that time sequence" thus established in the Court's earlier Phase I opinion. The Phase I opinion had been issued on March 9, 1984; rehearing had been denied on May 4, 1984; the Court's mandate was not issued until July 9, 1984 and petitions for certiorari were denied on November 27, 1984. Williams Pipe Line Co. v. Farmers Union Central Exchange, No. 84-184, 105 S.Ct. 507 (1984). The Commission will be addressing the issues in Phase I in the near future.

## QUESTION FOR THE RECORD FROM SENATOR BUMPERS

### Grand Gulf and Middle South Cases

19. Question: I realize that you are legally precluded from discussing in detail any cases currently pending before the Commission, such as the Grand Gulf and Middle South systems cases. It is very clear, however, that the possible outcomes of those cases could prompt the need for amendment of the Federal Power Act. I would appreciate your comments on the following possible amendments:

19a. Question: Amend the FPA to make sure that the public utility commission of any affected state approves the need for a plant before a public utility holding company can secure Commission approval;

Answer: The following comments should be reviewed with two factors in mind. First, there are several other cases presently before the Commission, in addition to those involving Middle South Utilities, which raise questions regarding cost allocation among units of a public utility holding company system. These include American Electric Power Service Corporation, Docket No. ER84-348-000 and Central and South West Services, Inc., Docket No. ER84-31-000. Until the outcome of these proceedings is known, it would be premature to try to contemplate what amendments to the Federal Power Act, if any, might be necessary as a result of various perceived problems involving public utility holding company systems.

The second factor is that no express recognition has been given in the suggested amendments to the kinds of benefits that may arise from economies of pooling and other forms of cost sharing that may be possible only under interstate commerce under the jurisdiction of the Commission.

In response to subpart a) of the question, it should be noted that the FPA gives no authority to the Commission to conduct prior review or authorization of construction of generating facilities. The FERC deals with questions involving what costs are recoverable in wholesale rates and what the allocation of such recoverable costs should be. Therefore, a state in which a generating facility is proposed to be constructed may choose to exercise prior certification authority.

With regard to other states that may be affected by such construction, however, I would note that the suggested term "any affected state" is a very broad one, since a state could be "affected" even if none of the affiliates of a particular holding company system operate within that state. For example, a non-affiliated utility in a state could purchase from one of the affiliates of the holding company system through a unit power agreement and therefore be "affected" by a plant constructed for the holding company system. Alternatively, a non-affiliated utility in a state could be a member of a power pool along with affiliates of the holding company and thereby have its costs "affected" through the operation of the pool. Therefore, the use of the phrase "of any affected state" in any proposed legislation might give a broader result than desired.

19b. Question: Amend the FPA to forbid system-wide cost equalization;

Answer: The phrase "system-wide cost equalization" is a very broad one, and its use in statutory language might well have unintended results. Holding company systems have taken a variety of approaches to production cost allocation, and the Commission has allowed them to be used. Systems such as the Southern Company System and Allegheny Power System have taken the approach of each operating affiliate basically owning generation capacity separately, with resulting basic separate cost allocations, while New England Electric System (NEES) has an affiliate, New England Power Company, that owns almost all of the generation capacity used by the NEES affiliates that sell at retail, so that production costs to the distribution affiliates are initially pooled. Each of these alternatives, when taken in conjunction with the particular holding company system pool agreement, results in some degree of cost sharing or equalization. Even in the various proceedings currently before the FERC that involve Middle South Utilities, Inc., a number of distinct proposals, rather than one single proposal, have been made that involve some degree of "system-wide cost equalization." In sum, an amendment using the particular suggested language would appear to be somewhat broader than necessary to achieve the stated intent.

19c. Question: Amend the FPA to allow state public utility commissions to prohibit flow-through of rates based upon plants they have not approved;

Answer: This suggestion appears to have some of the same problems as suggested in subpart a). That is, when the decision is made to construct a plant it may not be at all clear which states might ultimately be affected by the costs of that plant. A unit sale to a utility could make the particular plant of great interest to a state that had previously not considered itself affected by the plant. The factors that could bring about such an unanticipated unit sale include an unexpected plant or transmission outage. How would the prior lack of approval by the particular state commission be handled? It seems likely that considerable difficulties might be involved in determining which plants should be submitted to which state commissions for approval under the regulatory framework apparently envisioned by this proposed amendment.

19d. Question: Amend the FPA to allow state public utility commissions to determine whether any costs approved by the Commission may be flowed through to ratepayers;

Answer: The Commission is required under the Federal Power Act to determine the justness and reasonableness of filed rates for wholesale power sales and transmission in interstate commerce. If a state commission could disallow the flow-through of any portion of rates approved by the Commission for any reason of its own, the Commission's finding that the rates are just and reasonable would be largely superfluous. See Narragansett Electric Company v. Burke, 381 A. 2d 1358 (R.I. 1977), cert. denied, 435 U.S. 972 (1978) (rates charged to utilities under rate schedules filed with the Commission must be treated by state commissions as reasonable operating expenses). A key concern of Congress in enacting the Federal Power Act was to ensure that a Federal agency would act on rate matters involving electric service in interstate commerce, because the states involved might have divergent interests. It would appear that this concern is equally valid today.

19e. Question: Amend the FPA to limit cost recovery to the plant cost as estimated when approval of the plant's construction was obtained.

Answer: Accurate forecasting and cost minimization in utility plant construction are important goals. In exercising its statutory authority, the Commission evaluates all of the facts relevant to costs which a utility seeks to recover in wholesale rates. Amending the Federal Power Act to limit cost recovery for new generating plants to the original construction cost estimates, however, may have the unintended effect of encouraging utilities to build smaller, less capital intensive but less efficient plants. In addition, it may discourage utilities from taking a long-term view toward the least-cost strategy for meeting consumer requirements. In an extreme case, risk averse utility management may opt for no construction when a least-cost strategy would mandate construction of new generation plants. Accordingly, this proposal may have the unintended consequence of actually increasing electric rates to consumers in the long run.

## QUESTIONS FOR THE RECORD FROM SENATOR BINGAMAN

### Transportation of Natural Gas by Interstate Pipelines

20.Question: I certainly am interested in how regulation of the interstate transportation of gas under the Natural Gas Act should be structured to ensure that the natural gas market becomes a viable and competitive market in which consumers are provided adequate supplies of gas at the lowest reasonable costs.

I understand the Commission has just completed hearings on the controversial issue of the transport of natural as in interstate commerce. You received testimony from over 100 parties, representing producers, end users, inter and intra state pipeline companies, consumers and others. I believe the focus of your hearings was to determine if the current FERC programs under which interstate pipeline carriage is now provided for non-owner shippers are adequate and, if not, how the program can be improved. I represent a state that decided mandatory carriage was in its best interest. I would be interested in your views on this and related issues.

20a.Question: What is FERC's preliminary assessment of its authorities to order (directly or indirectly) carriage by the interstate pipelines?

Answer: Neither the Natural Gas Act (NGA) nor the Natural Gas Policy Act (NGPA) expressly grants to the Commission statutory authority to require pipelines to transport gas for others. Section 7(a) of the NGA, which does authorize the Commission to order jurisdictional pipelines to extend, improve or connect their facilities, and to sell gas to municipalities and other distributors, does not authorize the Commission to order pipelines to transport gas for others, however. 1/

Moreover, the Congress has on a number of occasions expressly declined to impose common carriage obligations on interstate

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1/ The Tarpon Oil Corp., 26 FPC 635, 639 (1961). See also Chandeleur Pipe Line Co., 44 FPC 1747 (1970), aff'd sub nom., Public Service Commission of New York v. FPC, 463 F.2d 824 (D.C. Cir. 1972).

natural gas pipelines. *See*, *e.g.*, section 602(b) of the NGPA and section 606(f)(2) of the Public Utility Regulatory Policies Act (PURPA). In addition, in sections 302 and 303 of the NGPA, the Congress expressly empowered the President to "require any pipeline to transport natural gas, and to construct and operate such facilities for the transportation of natural gas, as he determines necessary" to carry out certain defined powers in a natural gas supply emergency. No similar provision confers such authority on the Commission, whether in a natural gas supply emergency or otherwise. Thus, the Commission has stated that it is "without authority to require transportation services by interstate pipelines solely by reason of [NGPA] section 311(a)(1)." *See* Order No. 46, FERC Stat. & Reg. [Regulations Preambles (1977-1981)] ¶ 30,081 at 30,537 (1979).

Natural Gas Act section 7(c), the primary source of the Commission's authority with respect to pipeline transportation and the primary source of the Commission's authority in authorizing special marketing programs, SMPs, enables the Commission to issue certificates that *authorize* "able and willing" pipelines to transport gas. Once a certificate is issued, however, the applicant has the option of declining it. Section 7(e) of the Natural Gas Act grants the Commission authority to attach *conditions* to certificates. The courts have broadly construed the Commission's authority under this section. 2/ In this connection, the Commission

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2/ *See*, *e.g.*, Atlantic Refining Co. v. Public Service Commission of New York, 360 U.S. 378,391 (1959).

has relied on its section 7(e) authority to require releasing pipelines that transport gas under SMPs to provide firm transportation of their firm customers' nominated gas to the extent that supply is available to satisfy their nominations. 3/ However, attaching a systemwide, mandatory carriage condition to a routine certificate of limited, specific authority may well be determined by the courts to be beyond the scope of this authority, especially since Congress has consistently declined to authorize the Commission to require mandatory carriage.

Under the Natural Gas Policy Act, the Commission may also condition its grants of section 311(a) transportation authority. Again, there is no obligation on the part of the pipeline to accept the Commission's authorization.

On December 24, 1984, the Commission issued a Notice of Inquiry 4/ to examine all aspects of its regulation of interstate pipelines' transportation for others, including the question of The Commission's statutory authority, as well as the circumstances under which pipelines may be required or under legal obligation to provide transportation service for others. Because the issue of the scope of the Commission's conditioning power in this regard is one which potentially would affect all segments of the industry, the Commission is addressing the question generically.

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3/ Tenneco Oil Co. et al., 29 FERC ¶ 61,336 (December 21, 1984).

4/ Interstate Transportation of Gas for others, 50 Fed. Reg. 114 (January 2, 1985)

20b. Question: Will any such action reduce consumer prices for gas?

Answer: Under current market conditions, short-term supplies of gas are available in field markets at prices below the prevailing average prices at which many interstate pipelines are purchasing gas under long-term contracts. Under these conditions, savings to distributors and consumers could occur if distributors purchased short-term or spot market supplies in the field. The expansion of eligibility under the SMPs to include firm markets up to 10 percent of contractual entitlements is one attempt to allow distributors this flexibility in the context of SMP programs. Based on the reports to be filed, pursuant to the requirements of the generic SMP order of September 26, 1984, by all parties who participate in the SMPs, the Commission will be able to evaluate the success of that particular program for providing direct access.

Further insight will also be obtained pursuant to the Notices of Inquiry issued in Docket No. RM85-1-000. 50 Fed. Reg. 114 (Jan. 2, 1985) and 50 Fed. Reg. 3801 (Jan. 28, 1985). The commission will be able to evaluate whether there are additional steps that may be taken to allow consumers to shop for competitive gas supplies with lower prices.

20c. Question: Will it help producers in relatively isolated locations such as New Mexico?

Answer: Any expanded transportation policy could assist producers in New Mexico in marketing their gas. Currently, there are, for all practical purposes, only four pipeline purchasers of gas supplies in New Mexico: El Paso Natural Gas Co, Transwestern Pipeline Co. and Northwest Pipeline Corp., as interstate pipelines, and Southern Union Gathering Co. as an intrastate pipeline. Northern Natural Gas Co. also has facilities in the extreme southwest corner of the state. An expanded transportation program could expand the potential market of purchasers for that gas.

20d. Question: How does the exercise of such authority square with state jurisdiction, i.e., over distribution companies, intrastate pipelines?

Answer: There are serious questions relating to the relationship of state and federal regulatory controls that must be answered in the event that federal transportation policies are expanded. While the Commission's jurisdiction does not extend to distribution companies and intrastate pipelines, its transportation policies may ultimately and directly affect those entities and their markets. However, with respect to our current statutory limitations, many questions remain unanswered and the Commission expects the comments in response to our Notices of Inquiry in Docket No. RM85-1-000 to address these issues, among others. A preliminary review of the comments reveals concern by state commissions, intrastate pipelines and local distribution companies that the Commission's policy not compromise the states' authority.

20e. Question: How will the exercise of the authority affect existing customer commitments?

Answer: Reliability of service authorized under section 7 of the Natural Gas Act need not be compromised. However, it is unclear how an expansion of federal transportation policies would affect such customer commitments in terms of rates or degree of participation in such new programs. One reason for issuing the Notices of Inquiry in Docket No. RM85-1-000 is to obtain comment and evaluation on this issue from affected entities. Most interstate pipeline customers fall into two categories -- full requirements customers and those partial requirements customers who have more freedom in selecting the source of their gas supplies. In our Notice of Inquiry, the Commission recognized that "there are basic tensions between those who benefit from being able to obtain lower prices and greater flexibility and those who fear that they will face mounting unit fixed costs." 50 Fed. Reg. 114, 118 (Jan. 2, 1985). Accordingly, a series of questions was set forth concerning buyers' supply sources, convertability of purchase rights to transportation rights, rate structure changes as transportation replaces sales, protection of firm sales, etc. One of the questions raised in the recent Notice of Inquiry is "[t]o what extent should a pipeline customer's right to purchase gas (as evidenced by payment of a demand charge) be convertible into a right to have gas transported when that gas is not owned by the pipeline?" 50 Fed. Reg. 114, 118 (Jan. 2, 1985).

20F. Question: Will any such new program be appropriate in times of shortage as well as surplus?

Answer: As indicated in the recently issued Notice of Inquiry, Docket No. RM85-1-000, one of the objectives of our inquiry is to elicit constructive discussion about how regulation of interstate transportation of gas under the Natural Gas Act should be structured to ensure that the gas market is a viable and comparative market. 50 Fed. Reg. 114, 116. And in Phase II and III, The Commission again expressed its desire to develop and maintain "a regulatory framework that is appropriate under all conditions of gas supply and pipeline investment." 50 Fed. Reg. 3801, 3803 (Jan. 28, 1985). Over the past several years the Commission has authorized a series of transportation programs with various eligibility and end-use criteria. The Commission hopes that any transportation policy will successfully operate in both periods of shortage and surplus since decisions to buy and sell gas and transport that gas would be based on market considerations.

**20g. Question:** Are pipelines doing enough now without FERC action?

**Answer:** One of the reasons for our Notices of Inquiry in Docket No. RM85-1-000 is to determine the need for the Commission to provide incentives and direction for pipelines to take corrective actions that are responsive to increased competition. The extent to which Commission action is needed to supplement or encourage further actions will ultimately be determined after the comments in response to the Notice of Inquiry have been evaluated.

## Hydropower Program Reorganization

21a. Question: Chairman O'Connor - you emphasize in your testimony the importance of your efforts this past year in reorganizing the hydroelectric licensing program to improve efficiency. I hope this means that the application by Farmington, NM to construct a hydro-electric facility at Navajo Dam in the northwestern part of the State can be expedited. As I understand, the application has been on file since January of last year. Do you know the status of the application?

Answer: Mr. John A. Mackinnon, Attorney for the Navajo Nation, filed a Motion to Intervene on February 27, 1984, objecting to issuance of a license for Project No. 4720. Since then, the City of Farmington, New Mexico (Applicant), has been negotiating with the Navajo Nation on the issues of the intervention. By letter dated December 31, 1984, the Department of the Interior (DOI) states: "From the standpoint of 4(e), we recommend that the license not be issued until terms and conditions can be prepared." In the summary of this letter, reference is also made to the negotiations between the Applicant and the Navajo Nation, and recommendation is made that FERC not issue a license until "these activities reach their logical conclusion." Recent staff contact with the Bureau of Reclamation's Washington Office indicates that meetings between DOI and the Applicant will be held in early March 1985, with the expectation that the Navajo Nation negotiations will be successful.

21b. Question: Will you please inform me if you know of any reasons why a license cannot be granted?

Answer: The Commission staff will complete its analysis on the license application when DOI supplies its final comments as required by Section 4(e) of the Federal Power Act. The staff will then recommend to the Commission appropriate action on the license application.

FERC Fee Revenue

22a. Question: Your FY 1986 budget request of $95.568 million assumes collections of $66.077 million in fees, annual charges and other revenues. Your FY 1985 budget request of $100 million assumed you would collect $60 million in fees. However, you now project collections of only $41 million. Again in FY 1984, the Commission requested $94.5 million assuming collections of $60 million in fees. And again, you collected only $40 million. Is this year's assumption that you will collect $66 million any more realistic than the assumptions of the past?

Answer: In FY 1986 over $51 million of estimated revenue will be derived from present legislative authority or from rules already in place. The difference in revenues will be from enactment of the proposed annual charges legislation, which will account for approximately $10 million, and $5 million, which will be derived from proposed rulemakings to be considered by the Commission.

22b. Question: How did you make this assumption?

Answer: This assumption is based upon enactment by the Congress of the proposed annual charges legislation and implementation of the additional fee rulemakings.

# APPENDIX IV

## RESPONSES FROM CHAIRMAN NOBEL TO ADDITIONAL COMMITTEE QUESTIONS

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**United States Synthetic Fuels Corporation**
2121 K Street, N.W. Washington, District of Columbia 20586 Telephone (202) 822-6600

March 15, 1985

SENATE COMMITTEE ON
ENERGY AND NATURAL RESOURCES
RECEIVED
MAR 15 1985
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WASHINGTON, D.C. 20510

The Honorable James A. McClure
Chairman
Senate Committee on Energy and
  Natural Resources
Washington, DC 20510

Dear Mr. ~~Chairman~~: Jim,

Thank you for the opportunity to testify before the Committee on Energy and Natural Resources with regard to the budget and program of the Synthetic Fuels Corporation for fiscal years 1985 and 1986. In conjunction with my testimony, I am enclosing responses to the questions submitted for the record, together with those additional items I promised the Committee.

I look forward to working with you and the other Members of the Committee as we continue our efforts to develop a viable synthetic fuels industry.

Sincerely,

Ed

Edward E. Noble
Chairman of the Board

Enclosures

Answers to Questions Submitted to

The Honorable Edward E. Noble
Chairman of the Board
U.S. Synthetic Fuels Corporation

from the

Committee on Energy and Natural Resources

March 1, 1985

Questions 1 - 2, Submitted by the Majority
Questions 3 - 6, Submitted by Senator Warner
Questions 7 - 10, Submitted by Senator Evans
Questions 11 - 16, Submitted by Senator Johnston
Questions 17 - 60, Submitted by Senator Metzenbaum
Questions 61 - 65, Submitted by Senator Bingaman

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## Questions from Chairman McClure

Question 1: On February 11 OMB Director Stockman sent you a letter which purports to establish budgetary ceilings on the SFC. The letter goes so far as to set out an apportionment schedule through 1990 of your contract authority.

The Energy Security Act does not grant OMB such authority over the SFC. In addition, when the agreement was reached last year on the rescission of $5.375 billion, another element of the agreement was that the SFC would be permitted by the Administration to satisfy the statutory objectives of Phase I and submit its comprehensive strategy to the Congress.

(A) What has been your official response to Director Stockman's letter?

(B) Do you intend to comply with his suggested apportionment of your funds?

Answer 1: Please see my letter of March 1, 1985 to OMB Director Stockman (Attachment A).

## Letter of Intent Projects

Concurrent with rescinding $5.375 billion, the Continuing Resolution for fiscal year 1985 initially made available $5.7 billion of the remaining funds in the Energy Security Reserve only for obligation to projects with authorized letters of intent; and, if a lesser amount of funds are awarded, 50 percent of any balance shall cease to be available for obligation.

While such projects were placed in a special category, the legislation did not alter the non-binding nature of the Letters of Intent. However, the Board is under a legal duty to determine whether or not to award financial assistance to each of the eight Letter of Intent projects.

The Continuing Resolution also temporarily suspended the statutory Phase I production goal until Congressional approval of the Comprehensive Strategy for any future program. The legislative history reflects considerable expression of concern whether the removal of this production goal changes the basis on which the initial decisions were rendered by the Board. During Senate debate I observed that:

In February, 1982, the SFC Board adopted a resolution which in effect waived the near-term production goals as a criteria in reviewing project proposals for financial assistance. The projects with authorized Letters of Intent were considered under that policy which did not include consideration of the short-term production goal. Therefore, the subject projects were considered under essentially the same criteria that are reflected in the conference agreement, namely, a temporary set aside of the requirement for attainment of production goals" (See 130 Cong. Rec. S14216 (Oct. 11, 1984).

Subsequently, in the same statement, I observed that:

"Additionally, we would expect that the new Directors would consider them with the knowledge that those projects with authorized Letters of Intent were already analyzed and approved on a similar basis; namely, requiring technical diversity without regard to achievement of the near-term production goal.

"I would state further that we would not expect any such consideration or review by the Directors to result in a negative conclusion, in the absence of some major project-specific change in the status of a Letter of Intent project. Certainly, the waiver of the production goals, per se, is not intended to cause a Letter of Intent project to be altered or not go forward to contract."

According to your statement, the newly reconstituted Board will not complete its review of the Letter of Intent projects until the April Board meeting. This suggests that the Board will not be prepared to act on the Letter of Intent projects until even later.

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| Question 2a: | Would you clarify what is the Board's schedule for consideration of these letter-of-intent projects, which Congress intended be expeditiously acted on by the newly reconstituted Board? |
| Answer 2a: | The Board's schedule was set with the goal of proceeding as rapidly as practicable regarding (1) reviewing the acceptability of the letter of intent in light of each project's current status, and (2) completing the negotiations and documentation of each agreement that is required for final Board action. The factors leading to the schedule for the first category primarily related to readiness of the projects to proceed. In a few instances the schedule was adjusted by a month to balance Board workload and to allow sufficient time for the independent reviews of projects as requested by the reconstituted Board. Accordingly, the Board: reviewed the first project -- Great Plains -- in January, 1985, a month after the quorum was reconstituted; reviewed Seep Ridge in February; will review three projects -- HOP Kern, Forest Hill, and Northern Peat -- at the March meeting; and will review the remaining two projects -- Parachute Creek Phase II and Cathedral Bluffs -- at the April meeting. The eighth letter of intent project, Kentucky Tar Sand, has withdrawn. |

Answer 2a cont'd

The schedule for award decisions on the letter of intent projects will be largely determined by the complexity of negotiating issues. The Corporation is committed, however, to making the appropriate decisions as fast as sponsors are willing and able.

Question 2b: Recently the SFC Board approved a new Statement of Objectives and Principles, as well as a Business Plan; does this suggest that the Board intends to change the standards for review of the letter of intent projects before granting awards?

Answer 2b: The Board does expect to review each letter of intent project in light of the Statement of Objectives and Principles and the Business Plan to assess the project's contribution to the Board's Phase I goals. At the same time, however, each project will also be comprehensively reviewed on merit, and the original standards of each solicitation will still apply.

Question 2c: Similarly, does this suggest that these projects are going, in effect, to have to begin the process of SFC evaluation from the beginning, before the Board renders awards?

Answer 2c: Projects have always been evaluated for programmatic value. A review of projects against the Statement of Objectives and Principles and the Business Plan in no way suggests that the projects would begin the evaluation process anew. For example, the Statement indicates that projects must be sound to be supported. The standards of soundness would be in large measure the standards embodied in the projects' earlier Strength Reviews. The results of these Strength Reviews would still stand unless the project in the meantime experienced significant changes.

## Questions from Senator Warner

Question 3: Last year when you appeared before this Committee you assured us that 1984 was going to be the year of coal. Now it's 1985, and I want to know whatever happened to the year of coal.

Answer 3: The Corporation undertook substantial efforts to develop coal projects in its portfolio of assisted projects during 1984. The Corporation signed an assistance agreement with the Dow Syngas project and executed a letter of intent with the Great Plains project. Moreover, Corporation staff engaged in an extensive outreach program to solicit eastern coal projects. The Corporation issued four solicitations aimed primarily at coal -- i.e., the Solicitation for Coal or Lignite Gasification projects, the Solicitation for Coal or Lignite Gasification or Liquefaction Retrofit Projects, the Fourth General Solicitation which included a special award category for an eastern coal project, and the Solicitation for Coal-Water Fuel Projects. At present two coal projects, the Keystone project in Pennsylvania and the Utah Methanol project, are being evaluated in the Fourth General Solicitation. Four projects are pending in the utility category of the Coal-Water Fuel Solicitation, but the Board has deferred action on these projects while it studies how best to encourage commercialization of this unique fuel.

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| Question 4: | I have expressed to you and other members of the board my very strong interest in the Synthetic Fuel Corporation's supporting coal-water projects. I stand by that support. What is the status of the Corporation's Coal Water Solicitation? |
| Answer 4: | The Board cancelled the industrial category of this Solicitation because extensive activity was already under way in the private sector without SFC assistance. With regard to the utility category of the Solicitation, the Board is considering how best to encourage commercial application of this technology without in any way infringing on private sector development efforts. The Board has requested the staff to consider and report what actions by SFC may be appropriate to induce utility conversion to coal water fuels and to determine whether such action can be effected in the context of the current solicitation. |

Question 5: Although I understand it is outside of your jurisdiction, what is your view of the proposed Clean Coal Technology Program at the Department of Energy? What do you believe should be the role of that program?

Answer 5: While the Corporation is not in a position to assess the scope or effectiveness of the proposed program, we do recognize the importance of the effective, clean utilization of coal and the great potential for clean-burning coal technologies.

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| Question 6: | I commend you for the development of your Phase I Business Plan which specifies the kinds of projects you intend to fund. Where are you going to get the projects? In other words, are you convinced the private sector is interested in the same kinds of projects you have identified as important national priorities? |
| Answer 6: | The Corporation will solicit proposals utilizing the resource/technology combinations identified in the Phase I Business Plan for which no projects are now under consideration. Only a couple such areas exist, and we believe some projects could be attracted in each. These resource/technology combinations were designated as high priority largely because they are the most developed, or represent major resources for which several potential technologies are available -- i.e., an extractive tar sands project. |

## Questions from Senator Evans

Question 7a: It appears to me that the comprehensive strategy was to be in place and before Congress before the Corporation began to commit substantial sums of assistance to projects. You are proceeding in the reverse directions -- funding first and developing strategy later.

The strategy was due June 30, 1984, but we still have not seen it? Why?

Answer 7a: The Energy Security Act (ESA) originally contemplated commitment of about $20 billion, and then on the basis of actual experience with synthetic fuel projects the Board was to recommend to Congress a comprehensive strategy for commitment of up to an additional $68 billion. Such funding levels are no longer appropriate, of course, but the ESA did clearly anticipate that significant sums would be committed and substantial project experience gained before the submission of the Comprehensive Strategy.

We are now proceeding with parallel development of project definition/selection and the Comprehensive Strategy. The Statement of Objectives and Principles and the Phase I Business Plan constitute the basic framework for both. As the Board gets a clearer idea of the performance of the projects now in operation and under construction and of the requirements of projects now in negotiations, including the Letter of Intent projects, it will begin to define what tasks remain to be done to complete an effective national program. This recommendation then, will form the substance of the Comprehensive Strategy.

The June, 1984 deadline could not be met because the Board lacked a quorum of directors to adopt a comprehensive strategy.

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| Question 8a&b: | You now say that you intend to consider "a schedule for development and submission of the comprehensive strategy to Congress" at your March 19 meeting.<br>Why are you only considering a "schedule" at the March 19 meeting especially when schedules of the Synfuels Corporation have been substantially misleading in the past?<br>How far have you gone on substance? |
| Answer 8a&b: | We have made significant progress on the Comprehensive Strategy in the last three months, with the completion of the Statement of Objectives and Principles and the Phase I Business Plan. We are in the process of reviewing projects and considering options for the Comprehensive Strategy; this will take another month or two. At its March meeting the Board will consider a schedule for development of a draft document for Board review and comment. The reconstituted Board has been very efficient in meeting its schedules. |

Question 9: While strategy can be defined as the overall plan to reach a goal, tactics are the means to specifically attain those goals.

The Synfuels Corporation seems to have neither. As Chairman of the NW Power Council, I had the statutory responsibility to develop a 20-year least-cost electric power plan for the region. But we soon found out that that wasn't enough, so we developed a two-year action plan that is updated every other year.

Do you have any intention to adopt a similar approach at the Synfuels Corporation?

Answer 9: The Phase I Business Plan outlines targets for early action. These targets will naturally be considered almost monthly and adjusted as necessary as solicitations and negotiations proceed. As the Comprehensive Strategy is developed, longer term national approaches will also be identified, and these will, of course, be modified as events and circumstances change.

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| Question 10: | In your Statement of Objectives and Principles, you state that synfuels production will probably not become "economically attractive" until the end of the century. That puts it about 15 years away from being commercially viable.<br>a) What specific oil/natural gas price level are you assuming when you make that statement? Are you using EIA projections, or your own? |
| Answer 10(a): | The Corporation does not develop its own independent price projections. Rather, the energy price forecast used represents a consensus developed from twenty forecasts done by industry, private economists and government, including the EIA forecasts. The Corporation's consensus forecast is used for estimating SFC outlays and recoveries and assessing project viability. |

Question 10b: Time of commercialization:

In your Statement of Objectives and Principles, you state that synfuel production will probably not become "economically attractive" until the end of the century. That puts it about 15 years away from being commercially viable.

If that is true, do we need to be building the big synfuels plants right now, or should we be concentrating on smaller-scale technologies that involve lesser cost and more R&D and systems technology?

Answer 10b: While federal support for primary and bench-scale R&D is both necessary and effective, such support will not teach us how to organize, finance, build and operate commercial scale synthetic fuel projects like Union, Cool Water and Great Plains. Nor will such R&D work teach us how to solve the scale-up problems associated with commercial operations. Only full size plants can provide experience with scale-up and process systems integration which are essential for operating a commercial facility in an environmentally acceptable manner.

Fifteen years is not a long period of time when viewed against average lead times of 8 - 10 years from conception of a project to initiation of start-up operations, with perhaps another 2 - 3 years required to attain steady state operation at capacity for pioneer plants.

Question 10c: How long does it take to build a synfuels plant? Please provide construction/development timetables for the projects that already have assistance, and those that have letters of intent?

Answer 10c: As might be expected in an industry as technically diverse as synthetic fuels, different types of plants take different amounts of time to plan, organize financial and engineering resources, design, procure, construct and start up. The schedules shown below are for projects under agreement with SFC. Projects presently under negotiations with the Corporation probably will not be operative until 1990.

| Project | Months for Design | Months for Procurement & Construction | Months for Full Production |
|---|---|---|---|
| Union | 27 | 25 | 17(1)(3) |
| Cool Water | 48 | 28 | 24(1)(2) |
| DOW | 18(2) | 28(2) | 24(2) |

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(1) Initial Operation Currently in Progress
(2) Estimated
(3) To Date

## Questions from Senators Johnston and Bingaman

Question 11: The U.S. Synthetic Fuels Corporation Act directs the SFC to "establish a comprehensive strategy to achieve the national synthetic fuel production goal" established by the Act and submit it to the Congress. If approved by Congress the SFC is to follow that strategy. The final deadline for submission of the comprehensive strategy is June 30, 1985.

a. Do you plan to submit the strategy by that time?

b. If not, why? How much longer will it be before you do?

c. Can you tell us what the general thrust of the strategy will be?

d. Will you be proposing that SFC get additional spending authority?

Answer 11a: The Board would like to submit its recommended strategy as soon as a fully substantive and analytic document can be developed. We are hopeful this can be in the next few months, but the timing will necessarily be controlled by the Board's progress and experience with project development and analysis.

Answer 11b: See above

Answer 11c&d: In general, the Board's goal is to put in place for the country a synthetic fuel capability in the most efficient and econmic manner possible. The objective of the program is technical, environmental, and economic knowledge, which can best be gained from a few commercial plants operating over their full lifetime. It is not expected that additional funding authority will be necessary to achieve this objective.

Question 12: Please give us a brief status report on each of the three projects that have Financial Assistance Agreements with SFC--Cool Water, Dow Syngas, and Union Oil Parachute Creek.

Answer 12: Cool Water Coal Gasification Program

The Program was organized to design, construct, test and operate a 1,000 ton per day Texaco coal gasifier integrated with a 117 megawatt (gross) General Electric combined cycle electrical generating unit. The plant is located in the Mojave Desert, near Barstow, California adjacent to Southern California Edison's existing Cool Water generating station.

Construction and commissioning of the facility was completed, well under the original $294 million budget, in May 1984; start-up began immediately. On June 24, 1984 the plant successfully completed an SFC 10-day Acceptance Test, which qualified the project for SFC price supports, and began commercial operations.

Operations have exceeded the Program's expectations. Through December 1984, the plant has averaged a capacity factor of 35% vs. an anticipated capacity factor (for the first 7 months of operation) of 25%.

Although the plant is still in the "shake down" phase, environmental monitoring has begun in accordance with a Corporation-approved Environmental Monitoring Plan. Preliminary data are still being analyzed. It is expected that the plant will meet, or better, the various monitoring criteria established by the regulatory agencies involved.

Answer 12 con'td

SFC Price Differential Payments for production during the months of June through December 1984 totalled $10.78 million for approximately 1.33 million Btu's of synthetic medium-Btu gas produced and converted to electric power.

### Dow Syngas Project

This project will utilize entrained flow gasification to convert 2,400 tons per day of Western subbituminous coal into 30 billion Btu's of fuel gas. The project will be owned by LGTI, a wholly-owned subsidiary of Dow and will be located near Plaquemine, Louisiana within an existing Dow chemical complex. The fuel gas produced will be purchased by Dow for use instead of natural gas in an existing combined-cycle gas turbine for cogenerating electricity and steam.

The project will be totally financed by Dow. Engineering of the facility commenced upon signing of the financial assistance agreement with the SFC. Initial construction activities began in the fall of 1984, and start-up operations are scheduled for early in 1987.

Answer 12 con'td

Consistent with Corporation guidelines, Dow has prepared a draft Environmental Monitoring Plan. This document has been reviewed by the Environmental Protection Agency, the Department of Energy, and SFC staff. Official SFC approval of the Environmental Monitoring Plan is anticipated in March 1985.

Union Oil - Parachute Creek

Union Oil Company of California is the owner and operator of the Parachute Creek Project. Phase I of Union's multi-phase program is located near the town of Parachute, Colorado on the south rim of the Piceance Basin. The project consists of a mine, a shale retorting unit, and an upgrading facility to convert raw shale oil to a high grade synthetic crude. Phase I is designed to produce 10,000 barrels of shale oil daily. To date Union has expended approximately $650 million in the design, construction and start-up of the Phase I facility.

Construction of the facility commenced in July 1981 and mechanical completion occurred in August 1983. After check-out and commissioning the initial start-up testing began in October 1983. This large first-of-a-kind facility has proven more difficult to start up than originally contemplated. Both major and minor problems have been encountered during start-up testing. Problems of a relatively minor nature -- i.e., problems with conveyor belts and the rock pump hydraulic system -- were

Answer 12 con'td

solved fairly quickly and did not cause any major delays in start-up testing. The major problems encountered have centered on the retort scraper system, the cooling of retorted shale, and the seal leg system which removes the spent shale.

Between December 1983 and April 1984 Union undertook the redesign of the scraper, and the new design has proven to be highly efficient. No significant problems relating to scraper operation have occurred since April 1984.

As testing continued the shaft cooler proved not to be adequately cooling the retorted shale. Accordingly, modifications were made to the water injection system in the shaft cooler. Subsequent operations indicated a continuing instability near the bottom of the seal leg, at the point where steam and entrapped gases are separated from the shale. Various procedures were attempted to eliminate this problem and, while some progress was made, the overall problem of cooling the retorted shale was not resolved. The plant was shut down in December 1984 for internal modifications to the seal leg. These were completed in February 1985, but recent start-up attempts continue to show seal leg system instability. Several minor technical adjustments are currently in progress, and the plant is scheduled for further testing in mid-March.

Question 13a: Can you be sure you will achieve regional diversity of use of our coal resources with this program?

Answer 13a: The Corporation believes it can achieve regional diversity in utilization of coal resources. Current synthetic fuels projects use western lignite, (Great Plains), western bituminous (Cool Water), eastern bituminous (Tennessee-Eastman), and western subbituminous (Dow Syngas) coals. Two projects pending under the Fourth General Solicitation would employ eastern and western coals, respectively. Any new solicitation for coal projects would likely specify eastern or mid-continent bituminous coal as the feedstock.

Question 13b: Where will the projects come from if, after four general solicitations and six specific solicitations, they have not already surfaced?

Answer 13b: The Corporation is aware of a few new or ongoing projects which are likely to apply in a new solicitation, particularly if the Board gives such types of projects priority and establishes solicitation procedures compatible with their state of development.

Question 13c: What is the time frame for completion of Phase I?

Answer 13c: The current best estimate is that all awards under Phase I will be made by the second half of fiscal 1986. The pacing project would be one submitted under a new solicitation, such as in 13(b) above.

Question 14: In its 1983 Annual Report, SFC strongly recommended that Congress revise the Energy Security Act to allow SFC to assist so-called "semi-works" projects. These would be designed to fill the "gap" between DOE assisted demonstration projects and SFC commercial scale projects. This recommendation does not appear in the 1984 Annual Report. Why?

Answer 14: "Semi-works," perhaps more accurately described as "large pilot plants," provide confirmation of the rules for scaling-up in mixed flow patterns, heat transfer co-efficients, effect of surface to volume ratio changes, and other important variables. The data gathered help reduce the risk in going to the first commercial plant. The need to continue semi-works development for certain technologies exists, and the Corporation will address this subject in the Comprehensive Strategy.

Question 15a: Last year Congress set aside $750 million of the funds rescinded from SFC's authority for a Clean Coal Technology Program. This program would involve projects designed to encourage direct use of coal by eliminating or reducing the emissions into the air and solid wastes associated with coal combustion. The projects would be jointly-funded by government and industry.

Do you think this is a worthwhile concept?

Answer 15a: As noted in the answer to Question 5 above, we believe that clean burning coal technologies are important for the country's future, and a well-targeted program could be desirable. The Corporation has not studied such a program extensively, but does consider this a worthwhile concept. However, we have never addressed the questions of how such a program should be funded or at what levels.

Question 15b: Do you think that SFC should be authorized to implement it?

Answer 15b: I have always taken the position that the Corporation will follow whatever direction it receives from the Congress.

Question 16: Would you explain why the Business Plan excludes direct liquefaction of coal from Phase I? The plan states that the Board, "does not consider it likely that viable projects using it (direct hydrogenation) will be developed *in time* to be included in the Phase I program." (emphasis added) What time did you have in mind?

Answer 16: In response to the Corporation's solicitations, only one serious direct liquefaction project was proposed. In its initial size - a size needed to assure commercial viability - the plant required an amount of assistance beyond the maximum allowed to any one project in the Energy Security Act. Many alternatives were examined, but no viable project was found. Draft Target and Joint Venture Solicitations were published for expressions of industry interest but none was received. We continue to track developments in the field, and note that no commercial projects are presently contemplated.

An intermediate size pilot plant, or semi-works, around 3,000 T/D, probably is necessary before a commercially viable project can be undertaken. Direct liquefaction is a good example of how semi-works assistance could effectively stimulate synfuels technology development.

Questions from Senator Metzenbaum

Question 17: According to your testimony, financial assistance awards through FY 1984 totalled $741 million, and are estimated to total $4.06 billion in FY 1985 and $3.615 billion in FY 1986. What is the SFC's estimate of gross payouts between FY'85 and FY'96 for these agreements and anticipated agreements?

Answer 17: Based on our median price projections as of March 1, 1985 SFC's estimate of gross payouts between FY'85 and FY'96 under contractual agreements and anticipated agreements are $992 million and $6.835 billion, respectively. The $992 million relative to contractual agreements includes $276 million for the Union Phase I project to which DOE obligated $400 million of funds and which has been transferred to the Corporation.

Question 18: What is the SFC's estimate of gross payments to each project currently in receipt of an award or Letter of Intent for the assistance period cited in each contract or letter of intent? Please break this down by project.

Answer 18: Based on our median price projections as of March 1, 1985 SFC's estimate of gross payments to such projects totals $6.976 billion; after allowance for loan guarantee fees and profit sharing receipts, net outlays are estimated at $890 million. See Attachment B for individual project estimates. Gross outlays include amounts for the Union Phase I project; see Answer 17.

Question 19: Have any of the sponsors of projects with existing contracts or Letters of Intent made firm commitments to operate their projects beyond the period of SFC assistance? If so, please cite the projects and describe the commitments that have been made.

Question 20: Has the SFC ever requested such commitments? If not, why not?

Answer 19&20: In negotiating the terms of financial assistance, the Corporation seeks the maximum undertaking by project sponsors to construct and operate the proposed synthetic fuel project. However, the Corporation also recognizes that despite thorough analysis by both the Corporation and the sponsors at the time of entering into a financial assistance contract, circumstances may materialize which both parties agree would render further pursuit of the project imprudent. Consistent with this approach, the Corporation incorporates in its assistance contracts a concept of "permitted termination" in which a limited set of circumstances are identified under which sponsors could terminate participation in the project. These provisions generally involve a test based on substantial deterioration in projected economic viability in order to permit termination during the early years of construction and operation and a more subjective prudent business test after the project has been up and operating. Additional safeguards are included to assure against precipitous exercise of this termination option including: minimum required voting interests; a notice and discussion period prior to exercise of the termination right; Corporation security interests in project assets and price guarantee recapture provisions in

Answer 19&20: con'td appropriate circumstances. A copy of the permitted termination provisions from the Dow contract is attached. Negotiated term sheets attached to Letters of Intent include the framework for such provisions which are then detailed during the documentation process.

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| Question 21: | Under the pricing formula approved by FERC, what is the price Great Plains Gasification Associates (GPGA) currently receive for gas produced at the Great Plains Project? |
| Answer 21: | Under the FERC-approved tariff, the price for synthetic natural gas produced by the plant is $5.6457 per million Btu's, based on a price cap related to the price of #2 fuel oil. That price is for the month of January 1985, which is the most recent period for which information is available. |

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| Question 22a: | What is the total amount of energy investment tax credits collected by GPGA partners to date? |
| Answer 22a: | Through calendar 1984 the Great Plains project has generated $90.8 million in energy investment tax credits. Whether these are "collected" by the partners is a matter for their own consideration. For SFC evaluation purposes we assume that all owners can utilize such benefits currently. |

Question 22b: What is the the SFC's estimate of the amount of production tax credits which will be collected by the GPGA partners?

Answer 22b: On the basis of SFC's median price projection as of March 1, 1985, we estimate the project will generate $485 million in available production tax credits through the year 2000, absent any change in applicable tax laws and/or interpretation. Actual utilization of the available tax credits will depend on the year-to-year tax position of the individual project owners.

Question 23: In assessing the need for assistance to the Great Plains project, has the SFC employed its own projections of future oil prices, or does it rely on the sponsors' price projections?

Question 24: Was there a discrepancy between the sponsors price projections and those employed by the SFC? If so, how were those discrepancies resolved?

Question 25: Were the price projections used to determine financial assistance requirements the same as those used to project the amount of income the SFC expects to recapture from the project sponsors?

Question 27: Are the recapture projections of the GPGA partners different from those of the SFC? If so, what are they, and why are they different?

Answer 23, 24, 25, 27: The process of determining the need for assistance and establishing the appropriate level and mechanism for providing that assistance considers the price projections utilized by both the project sponsor and the SFC. These usually differ, and the differences are considered carefully during the evaluation process. Because the price forecasts used by SFC and the sponsor usually differ, their estimates of the taxpayer recovery amounts will also differ. The budget estimates of outlays by SFC and income to SFC are computed on the basis of the SFC's energy price projections.

Question 26: On a yearly basis, what are the current SFC projections of funds which will be recaptured from the Great Plains project?

Answer 26: We assume that, as used in this question, the term "recaptured" refers to profit sharing payments to SFC.

Based on our median price projections as of March 1, 1985, an assumption that the contract goes into effect in mid-1985, and assuming capital and operating cost estimates remain as projected in April 1984, profit sharing to SFC is estimated to total about $2.9 billion in current (as-spent) dollars as set forth below:

| Year | Amount ($millions) | Year | Amount ($ millions) |
|---|---|---|---|
| 1994 | $ 31 | 2002 | $174 |
| 1995 | 122 | 2003 | 192 |
| 1996 | 128 | 2004 | 207 |
| 1997 | 235 | 2005 | 223 |
| 1998 | 246 | 2006 | 238 |
| 1999 | 155 | 2007 | 261 |
| 2000 | 163 | 2008 | 280 |
| 2001 | 162 | 2009 | 295 |

This estimate assumes the price support arrangement, profit sharing structure, additional equity infusion by the owners and other terms agreed to in the April 1984 Term Sheet remain unchanged. The actual assistance structure may differ from the April Term Sheet to reflect changes which have occurred in the interim.

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| Question 28: | In determining that GPGA should receive $790 million in price guarantees did the SFC include in its calculations the expectation that the $790 million would be subject to North Dakota gross revenues tax? |
| Answer 28: | The price assistance level of $790 million that is contained in the term sheet of April 26, 1984 was premised on the North Dakota tax situation as it existed at that time. Thus, it assumed that the $790 million would be subject to the North Dakota tax. |

Question 29: If so, is it accurate to state that maintenance of the tax (exclusive of any other factors) would have no adverse affect of GPGA's prospects for receiving the $790 million in price guarantees? If this is not accurate, why is it not?

Answer 29: Maintenance of the tax would have a potentially adverse effect on GPGA's prospect for receiving SFC price guarantees. This was expressed in Article IX (3) of the Term Sheet which stated, "SFC shall be satisfied as to the extent of the applicability to the project of the severance and conversion taxes of the State of North Dakota." This was reiterated in the letter from Chairman Noble to GPGA on February 1, 1985, which stated, "Increased taxes resulting from the application of the North Dakota conversion tax to the subsidy payment from the Corporation, over and above market price revenues, place added and possibly insurmountable obstacles to favorable action on the project by our Board."

Question 30: Exclusive of any other factor, if the state decides to exempt the $790 million in price guarantees from the gross revenues tax, might the SFC reduce the overall assistance it anticipates to provide to GPGA?

Answer 30: Exclusive of any other factor, the overall assistance would be reduced if the state decides to exempt the $790 million from the gross revenues tax.

Question 31: Does the SFC have any policy regarding the practice of Board members making public statements on a project's prospects for receiving assistance prior to an official Board determination?

Answer 31: No. Such statements, however, would be expressions of the personal opinions of the individual director and could not bind the Board, whose actions require the positive vote of four directors.

Question 32: If there is no policy, please explain how the SFC guards against such statements affecting the financial position of the project's sponsors.

Answer 32: Section 116(f)(1)(B)(c) of the Energy Security Act authorizes the Board of Directors to close to the public portions of meetings likely to disclose information the premature disclosure of which would be likely to lead to speculation in securities, commodities, minerals, or land. Both inside and outside of Board meetings, Board members exercise their discretion in deciding what appropriately may be said on a project's prospects for receiving assistance prior to an official Board determination. Directors may not, however, disclose confidential information submitted to the Corporation by project sponsors; directors, like officers and employees of the Corporation, are subject to the strictures of the Trade Secret Act, 18 U.S.C. 1905, making such disclosure, except as authorized by law, a criminal offense punishable by fine, imprisonment, or both, and removal from office.

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| Question 33: | Under the pricing formula negotiated with DOE, what is the price Union Oil can currently receive for oil produced at its shale oil plant? |
| Answer 33: | Based upon the most recently available indices and market prices, the guaranteed price would be $51.20 per barrel, which would entail a price differential payment of approximately $19.80 per barrel. |

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| Question 34: | What is the SFC's estimate of the maximum amount of assistance which can be paid to Union Oil between now and the close of the price guarantee eligibility period? |
| Answer 34: | The maximum amount of assistance which can be paid is $400 million; SFC's current median case estimate of payments to Union Oil is $276 million. |

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| Question 35: | Have representatives of Union Oil requested or discussed with the SFC the possibility of extending the price-guarantee eligibility period for the project or providing additional assistance for Phase I? |
| Answer 35: | Representatives of Union raised questions about adjustments to the Phase I contract during the negotiation of the Phase II term sheet, but no Phase I contract adjustments were negotiated. No further such discussions have ensued since then. |

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| Question 36: | Does the SFC have the legal ability to extend the price guarantee eligibility period? |
| Answer 36: | An initial review of this question, done in the fall of 1983, indicated that the SFC most likely does have such authority, but no comprehensive legal analysis has been performed. |

Question 37: When DOE and Union Oil signed the financial assistance agreement in 1981, what were the projected dates for start-up and full operation?

Answer 37: Commissioning and start-up of the facility were projected to begin in July 1983. Start-up was anticipated to take up to six months to complete, with operations commencing in January 1984.

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| Question 38: | What are the current projections? |
| Answer 38: | Projections of this type are extremely hard to make with a high degree of accuracy as evidenced by Union's experience in the last year. Based on their current activity, we would anticipate that sustained operations at limited throughput may be achieved by the 3rd quarter of 1985. Operations at full throughput probably will not occur before the 4th quarter of 1986. |

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| Question 39: | Please describe the problems which have prevented the successful operation of the Union retort. |
| Answer 39: | Generally, this large first-of-a-kind facility has proven more difficult to start up than anticipated. Originally, Union had believed the large rock pump would be the plant's most critical design feature. The rock pump, however, has worked smoothly and reliably and, except for some early miscellaneous hydraulic problems, has not been a problem. The major problems encountered have centered about the retort scraper system, the cooling of the retorted shale, and the seal leg system.<br>The original scraper was a spiral-shaped device mechanically suspended from the top of the retort. As the shale was pushed upward by the rock pump, the scraper rotated and guided the retorted shale off the top of the hot rock bed over the sides into collector chutes leading to the shaft coolers. During early testing it was found that some of the retorted shale was pushed above the scraper, causing the system to become overloaded. In December 1983, a larger scraper was fabricated and placed around the original spiral device. While this redesign showed some improvement, it did not fully solve the overload problem. Consequently, the retort was shut down and a second redesign of the scraper system undertaken. This redesign focused on improving the efficiency with which the scraper plowed and groomed the top of the hot shale bed. |

Answer 39 cont'd

The new design was constructed, installed, and start up testing recommenced in April 1984. The new design has proven to be highly efficient, with no significant problems since April 1984.

With the restart of testing, an adequate amount of shale was retorted to displace cold raw rock in the shaft cooler and the seal leg. As testing continued, it became apparent that the retorted shale was not being adequately cooled, and the retort was shut down for review of operating data. Analysis indicated that the problem appeared to be uneven distribution of the cooling water spray onto the hot shale as it passed through the shaft cooler/seal leg assembly. A redesign of the water injection system was undertaken and, following modifications, the plant was started up again. However, system instability was encountered near the bottom of the seal leg, at the point where residual steam and entrapped gases are separated from the shale. Union tried to eliminate this problem by varying operating conditions. Although some progress was made, the overall problem of adequate cooling of the retorted shale was not resolved. Accordingly, the plant was shut down in December 1984 for installation of internal modifications to the bottom section of the seal leg. These modifications were completed in February 1985, but three recent start-up attempts still showed evidence of seal leg system instability. Several minor

Answer 39 cont'd

technical modifications to improve operational stability of the shaft cooler/seal leg assembly are currently in progress. The plant is scheduled for further testing in mid-March.

Neither the SFC nor Union believes anything is fundamentally wrong with the project. Union's initial difficulties in achieving sustained operations are typical of those identified by the Rand Corporation in its study of some 44 pioneer process facilities. Union's experience falls near the middle of the range of start-up times experienced by such plants. Moreover, the Rand study indicates that pioneer plants like Union which handle solids have significantly more severe start-up problems than non-solids handling plants.

Only two of the 15 solids handling plants reviewed by Rand reached the 85% production level by their second six months of operation. South Africa's experience with its SASOL I project also pointed to lengthy startup problems with the initial facility. SASOL I took about 5 years from completion of construction to reach a sustained 75% production rate. In contrast, SASOL II reached this production capacity in 24 months and SASOL III required less than a year.

Answer 39 cont'd

It is important to note that Union's problems, to date, have been essentially materials handling problems and do not indicate a basic flaw in the retorting process. Union's mine facilities have been commissioned and operated successfully. The retort unit appears to be performing satisfactorily, as is the upgrading facility. In line with the Rand study fundings, all of Union's unresolved problems are associated with the processing and/or handling of the retorted shale solids.

| Question 40: | Do the project sponsors have any plans to integrate a fluidized bed combustor into the Phase I operations? |
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| Answer 40: | As you may know, Union plans to build a fluidized bed combustor test facility adjacent to the Phase I retort as part of its Phase II program. While construction of the test facility is not anticipated to begin until Phase I has operated at 50 percent of design capacity for 30 consecutive days, we assume Union will make every effort and consider every possible option for bringing its Phase I facility into full production. Various contingent possibilities are under consideration. |

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| Question 41: | The August, 1984 GAO report on the Union Oil Shale Project, Phase II, stated that "Unishale B and C are the same from mining through the retort." Please describe in detail the differences between the Unishale B and Unishale C processes. |
| Answer 41: | Unishale C is a second-generation improvement of the Unishale B technology. In Unishale C the equipment beyond the retort is substantially different and will allow Union to recover additional energy from the retorted shale by burning the residual carbon it contains and recovering the heat produced. Unishale B does not recover the energy value of the retorted shale. In the B process the retorted shale is cooled in seal legs prior to wetting with water for disposal (Attachment C), In the C process, however, the hot retorted shale is crushed and fed to a fluid bed combustor (Attachment D). The hot gases produced are then used to heat the recycle gas needed for retorting. This eliminates the need for the process gas fired recycle furnace used for Unishale B; with Unishale C the process gas can be sent to the upgrading facility for use in lieu of purchased natural gas, thus improving the project's economics. The hot burned shale is cooled in a series of steam generators and the steam is used to produce electricity for the plant, which significantly reduces the net purchase of power and further enhances project economics. The shale oil deashing and upgrading facilities are identical for both processes. |

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| Question 42: | Is the actual shale retorting process different between Unishale B and Unishale C? |
| Answer 42: | While the retort vessels for Unishale B and Unishale C are expected to be identical, the total retorting process is substantially different, as described in Question 41. |

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| Question 43: | Would it be possible to modify Phase I to incorporate the Unishale C process? |
| Answer 43: | No space for any new full-scale equipment is available on the bench which holds the present retort facility. It is potentially conceivable that a fluidized-bed combustor could be located on the valley floor, some 1,000 feet below. Such an undertaking would probably require the installation of an insulated pipe to transfer the uncooled retorted shale from the retort to the combustor. Additionally, due to the large distance between the equipment on the valley floor and the retort on the bench, it would probably not be possible to use the recovered energy, consistent with the Unishale C design, to heat the recycle gas for use in the retort. |

Question 44: If so, what are the SFC's estimates of the cost of such a modification?

Answer 44: SFC has no basis for estimating the cost of the conceptual modification discussed in Question 43. Certain feasibility studies would be required to develop a preliminary cost estimate.

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| Question 45: | Would such modifications be less expensive than the projected cost of Union Oil, Phase II? |
| Answer 45: | Such modifications to Phase I may be less costly than the projected cost of Phase II, but it is also certainly questionable whether such an option would provide the same level of programmatic and technical benefit expected for Phase II. |

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| Question 46: | Please describe the SFC's assessment of the technical viability of the modified in-situ technology employed in the Cathedral Bluffs Project. |
| Answer 46: | The technical risk of the MIS technology was judged to be "moderate to high" in the SFC Third Solicitation Phase II Technology and Engineering Group Status Report for the Cathedral Bluffs project. The Report went on to say, however, "the potential programmatic benefits of this technology tend to balance the higher risk." The potential programmatic benefits of the project are discussed in question 49. |

Question 47: What is the basis for such evaluation?

Answer 47: A comprehensive evaluation was conducted by the Technology and Engineering Group in accordance with the Third Solicitation Maturity and Strength evaluation criteria. With respect to the MIS technology proposed in the Cathedral Bluffs project, the process developer's extensive proprietary R & D information was reviewed and discussed at length with the key staff members who actually did the work. A partial list of the items covered included: the selection, application and integration of key components and systems; scale-up risks and provisions made to minimize them; availability of required technologies; design background data; start up operating philosophy; events that could cause process upsets and provisions made to minimize their effect on operations; process description; process flow diagrams; piping and instrumentation diagrams; heat and material balances; pollution control technology; and resource characterization and recovery plan.

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| Question 48: | What percentage of the project's production is estimated to come from the modified in-situ technology? From the Unishale B technology? |
| Answer 48: | In the first phase of the project as presently proposed approximately 16% of the upgraded shale oil production comes from the MIS facility and approximately 84% comes from the Unishale B facility. Eventually, the number of MIS retorts would be increased and the room and pillar mine phased out. |

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| Question 49: | The Letter of Intent issued to the Cathedral Bluffs Project anticipated a combination of modified in-situ and Unishale B retorting technologies. If the project abandons the Unishale B technology, will the Letter of Intent be invalidated since the surface retort represents such a major part of the project's production? If not, why not? |
| Answer 49: | The Cathedral Bluffs project is first and foremost an MIS project; the associated surface retort is a necessary but ancillary part of the project. The selection of an alternative surface retort by the project sponsors in response to the SFC Board of Directors' Phase I Business Plan would not, therefore, necessarily invalidate the current letter of intent. The extent of project reconfiguration would have to be reviewed closely, however, and the Board would have to determine whether reconfiguration was so substantial as to constitute a new project and so invalidate the present letter of intent.<br>The major interest of the Cathedral Bluffs sponsors and the SFC with regard to this project is the modified in-situ (MIS) technology, because of its particular applicability to very deep and very thick oil shale deposits. These deep, thick deposits represent a substantial portion of the total domestic oil shale resource, which may not be effectively recovered by mining and surface retorting. |

Question 50: How will such a change in the configuration of the project affect the disposition of funds set aside for projects which currently possess Letters of Intent?

Answer 50: Generally speaking, so long as a change in configuration works no fundamental change in a project for which a letter of intent has been authorized by the Board, funding for that project is available from the $5.7 billion initially available only for obligation to projects for which the Board has authorized letters of intent. The Board must determine whether there had been such a fundamental change, and this decision would necessarily be based on a review of all changes in the project since execution of the letter of intent.

Question 51: Will the wet carbonization process employed in the Northern Peat project be applicable to coal resources?

Answer 51: SFC evaluations have seen practical application only to peat. We have heard of a private sponsor investigating lignite as a feedstock, but have not been privy to the data.

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| Question 52: | What is the guaranteed price per ton of the product generated by the Northern Peat project? |
| Answer 52: | The SFC price guarantee support, as set forth in the April 24, 1984 letter of intent, is $10.50 per million Btu of eligible product as adjusted monthly for inflation after February 1984 by the Producer Price Index for Finished Goods Excluding Food (not seasonally adjusted), less the prevailing New York posted price (converted into $ per million Btu) for residual No. 6 Fuel, 2.2% sulfur, as potentially modified according to a procedure to be agreed upon between the sponsor and the Corporation. |

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| Question 53: | Do the project sponsors have any firm commitments that the project's peat derived fuel will directly displace oil? |
| Answer 53: | The project sponsor has received letters of intent from 12 industrial and utility prospects whose combined fuel requirements exceed the plant's projected output more than two-fold. The project sponsor represents that each of these potential customers' current operations is fueled exclusively by oil derivative products. |

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| Question 54: | Please describe the status of the project's efforts to secure a 404 permit. |
| Answer 54: | The Corps of Engineers, as lead agency, has commenced proceedings toward preparation of a federal environmental impact statement (EIS) and a Section 404 permit for the project. Environmental data necessary for the EIS and permit documentation have been collected and are ready for compilation. The Corps is awaiting receipt of these data in order to proceed with the EIS process, while the project is awaiting SFC confirmation of interest before proceeding further. |

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| Question 55: | Please describe the current status of the Kentucky Tar Sand Project. |
| Answer 55: | By letter of March 1, 1985, Texas Gas Development Corporation, the sponsor of the Kentucky Tar Sand Project, informed the Corporation that it was terminating the project and withdrawing its request for financial assistance. |

Question 56: Does the project have a lead sponsor?

Answer 56: See answer to Question 55 above.

Question 57: How long has the project been without a lead sponsor?

Answer 57: See answer to Question 55 above.

Question 58: What percent of equity is currently pledged by existing partners? Are existing sponsors committed to continuing their participation in the project?

Answer 58: See answer to Question 55 above.

Question 59: The sponsors of the Seep Ridge Project have requested that the total of SFC assistance be increased to almost three times the amount included in the Letter of Intent. If the Letter of Intent were renegotiated to include such an increase, would the renegotiated letter be considered a "new" Letter of Intent for purposes of considering the disposition of funds set aside for projects currently in possession of Letters of Intent?

Answer 59: While the Seep Ridge project sponsors have notified the Corporation that they may seek an increase in the obligational authority contemplated by the letter of intent, they have not to date made a formal request for any new level of assistance. The Corporation currently is engaged in fact-finding with the Seep Ridge sponsors and is reexamining all aspects of the project.

An increase (or decrease) in the amount of SFC financial assistance would not necessarily invalidate a project's letter of intent or elibilility to receive financial assistance from funds set aside in the Continuing Resolution for projects with authorized letters of intent. Rather, this would depend on the reasons underlying the change in the amount of financial assistance, and would, of course, require a Board determination as to the project's continued eligibility and desirability.

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| Question 60: | At the hearing today you stated the SFC does not currently have enough experience with projects to prepare a long-term comprehensive strategy. When does the SFC expect to gain adequate experience from Phase I projects to enable the SFC to prepare a long-term comprehensive strategy? |
| Answer 60: | The SFC will prepare and submit to Congress a Comprehensive Strategy as soon as feasible. This will draw on our experience to date with project design, solicitation, negotiation, financing, monitoring, etc. Experience will accumulate slowly and steadily, and knowledge will always be expanding. The SFC will develop its strategy on the basis of more than four years of operation and experience. Periodic updates will be provided to Congress following submission of the Comprehensive Strategy. |

## INDEX

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Attachment E. Termination by Sponsor and Dowsub

ATTACHMENT A

United States Synthetic Fuels Corporation
2121 K Street, N.W. Washington, District of Columbia 20586 Telephone (202) 822-6600

March 1, 1985

The Honorable David A. Stockman
Director
Office of Management and Budget
Old Executive Office Building
Washington, D.C. 20503

Dear Mr. Stockman:

Both as a taxpayer and as Chairman of this Corporation, I believe there is significant benefit to including all expected outlays of the federal government in the budget, and I welcome your efforts to do so, as reflected in your letter of February 11, 1985. Corporation outlays have always been "on-budget" within the Treasury Department, and this would complement that status.

In creating the Synthetic Fuels Corporation under the Energy Security Act, Congress specifically stated that the Corporation should not be treated as an agency of the United States except as specifically provided in the Act. Further, Section 153 of the Act specifically provides for the budgetary treatment of the Corporation and any change in such treatment will, of course, require legislative action. These provisions were included in recognition of the flexibility required to enable the Corporation to carry out its purpose. This was, and remains, one of the crucial underlying principles that has created private sector confidence that the federal government, through the Corporation, is serious about developing a national synthetic fuels capability.

The controls and allocation procedures normally applied to an on-budget agency , if applied to the Corporation, would seriously limit our ability to establish the proper business relationships with the corporate sponsors of synthetic fuels projects. These are vital to our achieving the goals of the program, and such limitations would specifically violate the original and proper intent of Congress in establishing the Corporation as it did.

I welcome the opportunity of discussing this matter with you in greater detail so that we can work together to achieve the benefits of an integrated budget while preserving the appropriate Corporation capabilities.

Sincerely,

Ed

Edward E. Noble
Chairman of the Board

Attachment B

## Projected SFC Net Outlays (FY 1985-2010)
($ millions)

### SFC Outlays/Receipts*

| | SFC Assistance | Gross Outlays | LG Fees | Profit Sharing | Net Outlays |
|---|---|---|---|---|---|
| Contract Projects | | | | | |
| Union Phase I** | $400 | $276 | $ - | $ - | $276 |
| Cool Water | 120 | 96 | - | 82 | 14 |
| Dow Syngas | 620 | 620 | - | 8 | 612 |
| Subtotal | 1,140 | 992 | - | 90 | 902 |
| Letter of Intent Projects*** | | | | | |
| Union Phase II | 2,700 | 2,700 | - | 1,927 | 773 |
| Cathedral Bluffs | 2,190 | 2,023 | 61 | 892 | 1,070 |
| Seep Ridge | 45 | 45 | 1 | 13 | 31 |
| Great Plains | 790 | 790 | - | 2,911 | (2,121) |
| Northern Peat | 365 | 365 | 3 | 212 | 150 |
| HOP Kern | 100 | 46 | 2 | 10 | 34 |
| Forest Hill | 60 | 60 | 1 | 9 | 50 |
| Subtotal | 6,250 | 6,029 | 68 | 5,974 | (13) |

* Based on SFC median scenario as of March 1, 1985.

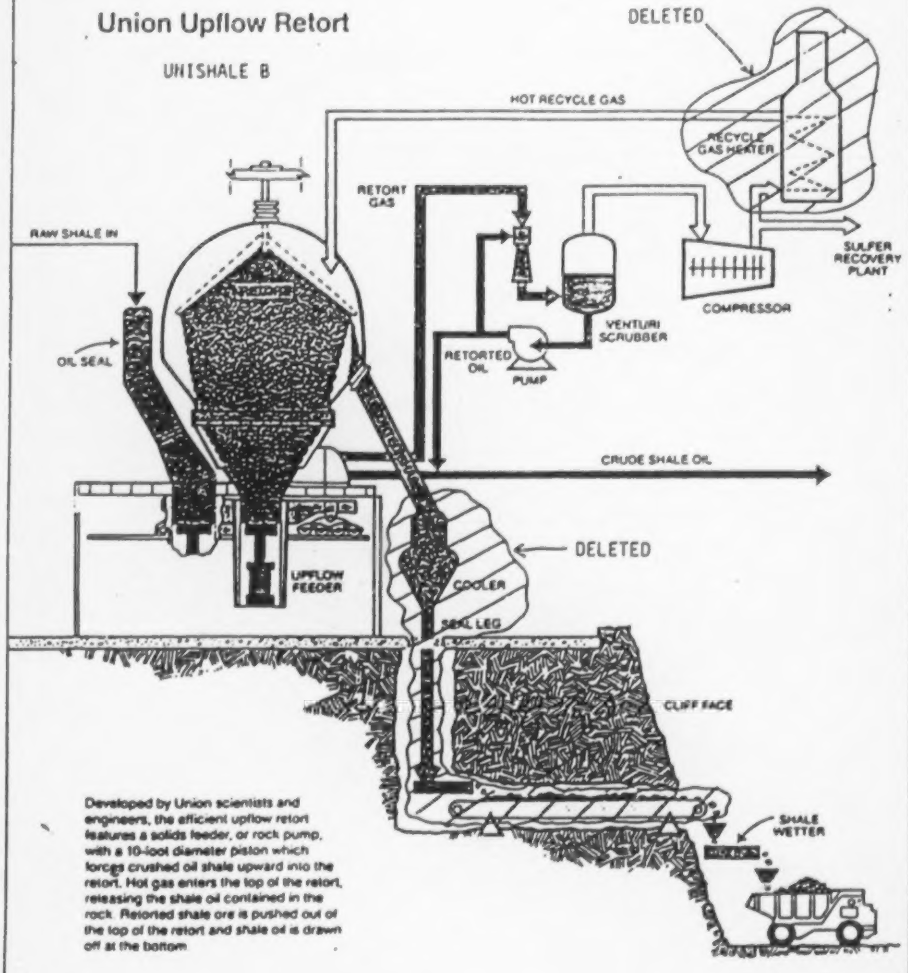
** Funds for Union Phase I were obligated by DOE; contract and budgetary reporting responsibility was transferred to the Corporation in February 1982.

*** Excluding Kentucky Tar Sand project, which has been withdrawn.

ATTACHMENT C

## Union Upflow Retort

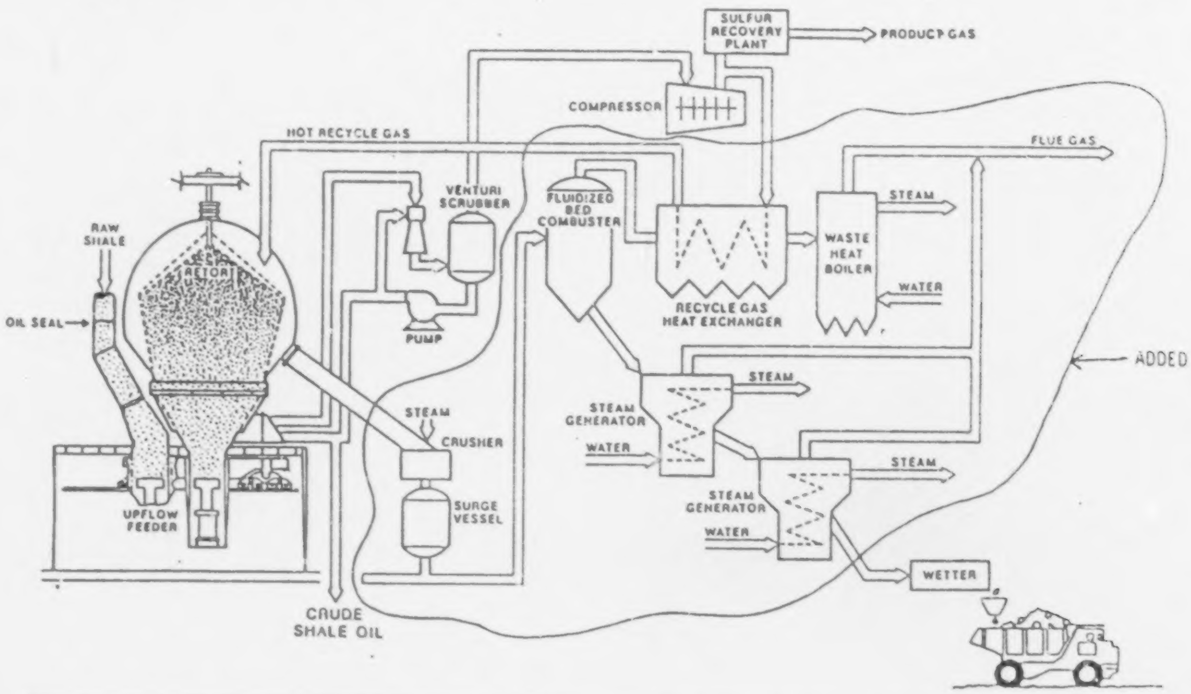
UNISHALE B


DELETED
HOT RECYCLE GAS
RECYCLE GAS HEATER
RETORT GAS
RAW SHALE IN
SULFER RECOVERY PLANT
COMPRESSOR
VENTURI SCRUBBER
RETORTED OIL
PUMP
OIL SEAL
CRUDE SHALE OIL
DELETED
COOLER
UPFLOW FEEDER
SEAL LEG
CLIFF FACE
SHALE WETTER

Developed by Union scientists and engineers, the efficient upflow retort features a solids feeder, or rock pump, with a 10-foot diameter piston which forces crushed oil shale upward into the retort. Hot gas enters the top of the retort, releasing the shale oil contained in the rock. Retorted shale ore is pushed out of the top of the retort and shale oil is drawn off at the bottom.

ATTACHMENT D

# UNISHALE C


SULFUR RECOVERY PLANT
PRODUCT GAS
COMPRESSOR
HOT RECYCLE GAS
FLUE GAS
VENTURI SCRUBBER
FLUIDIZED BED COMBUSTER
RAW SHALE
OIL SEAL
RETORT
STEAM
WASTE HEAT BOILER
WATER
RECYCLE GAS HEAT EXCHANGER
PUMP
ADDED
STEAM
STEAM GENERATOR
WATER
STEAM
CRUSHER
STEAM
STEAM GENERATOR
WATER
UPFLOW FEEDER
SURGE VESSEL
WETTER
CRUDE SHALE OIL

· ATTACHMENT E

## ARTICLE 8

### TERMINATION BY SPONSOR AND DOWSUB

8.1 **Termination Prior to Commercial Production.** At any time prior to the Commencement of Commercial Production, Sponsor and Dowsub may elect not to proceed with the Project if they reasonably and in good faith determine that any governmental, regulatory, judicial or legislative action or any decrease in natural gas prices, increase in capital or operating costs of the Project or change in inflation or any combination of the foregoing has occurred that would cause a reasonably prudent businessman to conclude that there no longer exists a reasonable assurance that the Project will generate a level of after-tax rate of return on equity for the contemplated 20-year period of operation thereof (determined by assuming that all tax deductions and credits resulting from the Project will be fully utilized by an entity paying taxes at the maximum United States federal corporate income tax rate) which is reasonable relative to the projected level therefor contained in the Information Memorandum, provided, however, that in making any of the determinations referred to in this Article 8.1, no consideration will be given to (a) any event or condition which results from the failure of Sponsor or Dowsub to comply with its obligations under clauses (ii) and (iii) of Article 6.2(b) hereof, (b) possible licensing fees, royalties or other payments that may be or become payable with respect to Proprietary Rights or Project Inventions but that have not been included in the projections set forth in the Information Memorandum, (c) any change with respect to the ownership of the Proprietary Rights described in Part I.A. of Schedule 2.22 hereto, or (d) any event or condition which could be prevented by the transfer of the Facilities to the Sponsor.

8.2 **Termination After Commercial Production.** At any time after the Commencement of Commercial Production, Sponsor and Dowsub may elect not to proceed with the Project if they reasonably and in good faith determine that, after the due consideration of the economic feasibility of the Project a decision to continue the Project would not be a prudent business decision; provided, however, that in making any of the determinations referred to in this Article 8.2, no consideration shall be given to (a) the economic position of Sponsor or Dowsub, (b) possible licensing fees, royalties or other payments that may be or become payable with respect to Proprietary Rights or Project Inventions but that have not been included in the projections set forth in the Information Memorandum, (c) any change with respect to the ownership of the Proprietary Rights described in Part I.A. of Schedule 2.22 hereto, or (d) any event or condition which could be prevented by the transfer of the Facilities to the Sponsor.

8.3 **Termination Procedures.** Any election by Sponsor and Dowsub to not proceed with the Project shall be made by the due adoption by the Board of Directors of Sponsor and Dowsub of resolutions making such election and the applicable determination upon which such election is based. No election by Sponsor and Dowsub to not proceed with the Project may be made unless at the time such election is first seriously considered by Sponsor and Dowsub, but in no event less than 30 days prior to the date upon which such election is to be made, Sponsor and Dowsub shall have given notice to the Corporation that such election may be made on such date and that representatives of Sponsor and Dowsub are prepared to meet with representatives of the Corporation to discuss the basis for such possible election, together with information in reasonable detail regarding the basis for such possible election accompanied by an Officer's Certificate of any Executive Officer of Sponsor and an Officer's Certificate of any Senior Officer of Dowsub. Sponsor and Dowsub agree to cause their representatives to be available to meet with representatives of the Corporation after the giving of such notice and prior to the date of such election. In making any such election, Sponsor and Dowsub shall give due consideration to any pertinent information furnished to it by the Corporation. Upon the making of any such election, Sponsor and Dowsub shall deliver to the Corporation a notice specifying the election made, together with any information upon which such election was based to the extent not previously given to the Corporation pursuant to this Article 8.3 and a copy of the resolutions adopted by the Board of Directors of Sponsor and Dowsub making such election and the determination upon which such election was based, accompanied by an Officer's Certificate of any Executive Officer of Sponsor and an Officer's Certificate of any Senior Officer of Dowsub.

# APPENDIX V

## ADDITIONAL STATEMENT FOR THE RECORD FROM JIM MATHESON, ENVIRONMENTAL POLICY INSTITUTE

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ENVIRONMENTAL POLICY INSTITUTE

Written Statement
submitted by
Jim Matheson
Director
Synthetic Fuels Project
Environmental Policy Institute
to the
Senate Committee on Energy and Natural Resources
March 1, 1985

# Written Statement of Jim Matheson
Director, Synthetic Fuels Project
Environmental Policy Institute
Submitted to the Senate Energy and Natural Resources Committee
March 1, 1985

This written statement on the operation and performance of the Synthetic Fuels Corporation (SFC) is presented on behalf of the Environmental Policy Institute (EPI). Our request to present oral testimony at today's hearing was denied, but Committee staff did indicate that a written statement would be accepted for the record. While we recognize that it is an accepted practice during this type of budget hearing to hear only from representatives of the government entity under review, we felt justified in this particular situation in our request to appear. Since the SFC is not subject to annual authorizations and appropriations, this Committee's oversight hearings provide one of the few opportunities for Congress to review the SFC. With the concerns over the deficit and proposed spending cuts in many federal programs occupying a central stage, the Corporation with its nearly $8 billion in spending authority clearly merits substantial attention, and we believe the participation of outside witnesses would better enable the members of the Committee to make a well-balanced assessment of the program.

Since the early 1970's, EPI has been actively involved in the discussions over the proper federal role in the development of synthetic fuels. Since the passage of the Energy Security

Ace, EPI has closely monitored the activities of the SFC and has assessed many of the projects which have applied for SFC financial assistance. EPI supports the reduction of our present reliance on foreign supplies of oil, and recognizes that synthetic fuels need to be explored as a potential contributor to achieving that goal. The major issues to be resolved involve the size, speed, and scope of the federal synfuels program. EPI has repeatedly voiced concern about the advisability and effectiveness of a multi-billion dollar synfuels commercialization program. An assesment of the history of the current program points to continued failure.

## THE PROJECTS

The Energy Security Act gave the Department of Energy authority to fund projects while the SFC was being organized. DOE awarded funding to three projects:

* The Colony Oil Shale Project in Colorado received a $1.2 billion loan guarantee, and was touted as the premier oil shale project in the United States. In May, 1982, Exxon (a 60% partner) pulled out of the project due to a doubling of anticipated costs, and the project collapsed.

* The Great Plains Coal Gasification Project in North Dakota received a $2.02 billion loan guarantee and a special pricing formula from FERC which guarantees the project above market prices for its high-btu gas. The project was built ahead of schedule and under budget. Yet, it is rumored that the project is not running at expected efficiency levels, and project sponsors have threatened to abandon the venture unless they receive an additional $790 million in price supports from the SFC.

- The Union Oil Shale Project, Phase I in Colorado was awarded $400 million in price guarantees. The project was completed well over a year ago, and it is still encountering difficulties in start-up attempts. There is doubt as to whether the project will ever become fully operational without significant modifications. This is a graphic illustration of the problems associated with jumping directly from a small model scale to a commercial scale. The project sponsors have violated federal OSHA standards, which resulted in the deaths of two workers, and have also been charged with violations of the Clean Water Act and the Clean Air Act.

When the SFC became operational, it set up procedures where projects could apply for funding. There have been four general solicitations and numerous "targeted solicitations," which were directed toward a specific resource and/or technology. The initial general soliciation attracted 63 applicants, none of which eventually received a funding award. The ensuing solicitations, more often than not, involved the same projects reapplying for funds. To date, the SFC has funded only two projects. In both cases, the SFC was under intense pressure to show progress which could help justify its existence. A review of these projects illustrates the extent the SFC had to reach to demonstrate a "productive" four years:

- The Coolwater Coal Gasification Project in California received $120 million in price guarantees. This 1000 ton per day project was always considered a demonstration plant by its sponsors. The sponsors indicated that they would build the plant regardless of whether they received SFC assistance. In fact, Eastman Kodak constructed a plant in Tennessee which utilized the same gasifier and processed a similar amount of coal. The key difference between the projects, of course, is that the Kodak plant received no federal subsidies.

* The Dowsyn Coal Gasification Project in Louisiana received $620 million in price guarantees from the SFC. This assistance package is almost four times the total cost of the project, and more than initially requested by the project sponsors. In an interesting coincidence, the project employs a gasifier which is only a modification of the gasifier utilized in the Coolwater and Eastman Kodak plants.

Eight projects have received, or have been authorized to receive, letters of intent to recieve funding that totals $6.8 billion. The SFC has indicated that letters of intent are non-binding documents which outline a set of terms which should be met before a financial award can be made. It is true, however, that projects who receive letters of intent have generally completed most of the SFC's review processes, and therefore it can be assumed that these eight projects are the most advanced projects currently being considered by the SFC. A review of these projects underscores the lack of viable commercial options the SFC has to pursue.

* The Union Oil Shale Project, Phase II in Colorado received a letter of intent offering $2.7 billion in price guarantees. This letter was awarded despite the severe technical problems Union's first module has encountered. The second phase employs virtually the same retorting technology, with the only difference being the addition of a fluidized bed combustor to process spent shale. The Energy Security Act specifically requires the SFC to pursue a diverse set of technologies, and the question to be answered is whether a fluidized bed combustion unit is worth an additional $2.7 billion. A final point of interest with the second phase of the project--the addition of the combustor

is supposed to provide increased efficiencies to the overall process. Yet, the assistance offerred in the letter of intent for the second phase is larger on a per barrel basis than the first phase received. A July, 1984 GAO report projected that the project is expected to receive a price guarantee of $92 per barrel when it begins operations in 1989.

* The Cathedral Bluffs Oil Shale Project in Colorado received a letter of intent for $2.19 billion in loan and price guarantees. This project will employ modified in-situ (MIS) retorting for about 20% of its production. This process has encountered numerous problems during test runs on smaller scales. The other 80% of production will be supplied from a Union Oil surface retort, the same which has encountered so many problems with Union's own project. The latest rumors indicate that the project may switch to a new surface retorting technology--the Paraho technology. This raises two important questions: (a) The Paraho process has been tested on a 150 barrel per day model. Should there not be concern about scaling up from this small of a model in light of Union's difficulties? (b) A change in technology is a significant change in the project itself. Will the project remain in its advanced status with a letter of intent, or will the project be subjected to the SFC's standard review process like all other projects.

* The Great Plains Coal Gasification Project in North Dakota has received a letter of intent for the $790 million in price guarantees the sponsors have demanded with a threat of abandoning the project otherwise. A GAO report estimated that without any additional federal assistance the project would enjoy a 13% average after tax annual return during the first 20 years of operation. Even after the SFC took the preliminary step of signing a letter of intent, the sponsors of the project indicated the aid would not be enough to ensure a long-term commitment to the project, leaving the possibility of the project coming back to ask for additional subsidization in a few years.

* The Northern Peat Energy Project in Maine has received a letter of intent offering $365 million in loan and price guarantees. The assistance amount is almost double the project cost. While the project sponsors originally requested $3.50 per million btu, the letter of intent offers $10.50 per btu. Even more disconcerting is the fact that the project will process peat--a resource with limited replicability--to produce a solid fuel which will displace

coal. This end-product hardly matches that envisioned by the authors of the Energy Security Act.

* The Kentucky Tar Sand Project has received a letter of intent offering $543 million in loan and price guarantees. After the lead sponsor of the project was taken over and made a subsidiary of a new parent company, that sponsor's commitment to the project was reduced from 100% to 20% of the required private equity. After months of searching, no additional sponsors have been found. Still, the letter of intent remains and the project is a leading candidate for SFC assistance.

* The Seep Ridge Oil Shale Project in Utah received a letter of intent for $45 million in loan and price guarantees. In January 1985, it was reported that the project's sponsors had gone back to the SFC and requested almost three times the assitance offered in the letter of intent.

* The HOP Kern River Heavy Oil Project in California has received a letter of intent for $100 million in loan and price guarantees. The SFC has proposed a letter of intent for $60 million in loan and price guarantees for the Forest Hill Heavy Oil Project in Texas. Both projects process heavy oil, a resource which is included under the jurisdiction of the SFC, but which is not as a high priority as coal or oil shale in terms of total resource base. Moreover, many heavy oil recovery processes have been put into application without federal assistance.

The Corporation currently has a few other projects which have not yet reached the letter of intent stage. However, these projects do not offer any more promise than those which have moved farther along in the SFC's awards process:

* The Paraho-Ute Oil Shale Project in Utah is currently involved in its third try at obtaining SFC funds. The project had been given a deadline last year for meeting certain criteria. These criteria were no met, but since there was an absence of a quorum on the Board of the SFC, a vote could not take place to remove the project from consideration. In February, 1985, despite the fact that no work had been performed by the project on its application

for many months, a 60-day extension was granted by the board for the project to meet the standards of its 1984 deadline.

* The Enpex Tar Sands Project in Texas is applying for assistance for a plant that would produce 950 BOED of bitumen. The project's proposed commercial plant, in the words of an SFC Board member, is basically a replication of an existing pilot plant.

* The American Syncrude Oil Shale Plant in Indiana remains in contention for funding in spite of the fact that eastern oil shale projects are not a high priority for the SFC.

* The Utah Methanol Project is a coal liquefaction plant. It's production will be 330 BOED, an extremely small size which may accuratly indicate the distance coal liquefaction technologies must go before being commercially viable.

* The Keystone Coal Gasification Project in Pennsylvania represents the Corporation's single opportunity for funding an eastern coal project. Westinghouse supplied the technology for the project originally and was the sponsor of the project. The project has since been dropped by Westinghouse and taken over by three sponsors.

* There are four projects remaining in a coal-water fuels solicitation. This solicitation is currently under review by the SFC staff, with some Board members having advocated the elimination of the solicitation.

This list of projects represents what the taxpayer has gotten out of four years of activity at the SFC. There are questions which can be raised about the legitimacy of every project that has been funded or has received a letter of intent. This is a clear indication of the current state of synfuels technologies. The problems associated with the scale-up of immature technologies produce huge financial assistance requests, and a multitude of unknowns regarding the actual performance of the projects.

## THE SFC'S PROGRAMS

The lack of contracts signed by the SFC during its four-year existence has been a source of concern. In attempts to alleviate these concerns, and demonstrate that progress is being made, the SFC has periodically announced new schedules, objectives, business plans, and solicitations to the point of sounding like a broken record. With each announcement, the new policy has been proclaimed as the vehicle which will guide the SFC to a successful completion of its mission. In fact, it appears that the SFC has rarely known exactly where it was going:

* In testimony before the Senate Energy and Natural Resources Committee in 1982, SFC Chairman Ed Noble expressed the hope of granting up to $4.5 billion in awards in 1982. No awards were made.

* Before several committees in 1983, Chairman Noble outlined plans to assist approximately 6 projects in FY 83 at a cost of $6 billion, and 6 projects in FY 84 at a cost of $7.2 billion. The $120 million contract signed with the Coolwater Project was the only award given in FY 83.

* In testimony before the Senate Energy and Natural Resources Committee in February, 1984, Chairman Noble projected total SFC commitments of $11 billion in FY 84 and FY 85. Only Dowsyn's $620 million contract was awarded in FY 84. No awards have been made thus far in FY 85.

The latest in the SFC's series of programmatic plans is the business plan adopted at its February, 1985 Board meeting. This plan presents some positive statements. In general terms, the SFC claims it will not fund duplicative technologies. This is a welcome sign after the Texaco gasifier, which was put on line with private funds by Eastman Kodak, was funded by the SFC with the Coolwater Project and again in a modified form with the Dowsyn Project. The Plan also identifys certain technologies which are not mature enough to be considered for SFC funding. However, the document is written in general terms which could be applied in a multitude of ways.

One aspect of SFC policy that has been a constant for the past four years has been the offering of huge price guarantees. Whether it's $12.50 per million btu for the Dowsyn Project or $67 per barrel for the Union Oil Shale, Phase II Project, SFC subsidies are consistently more than double market prices. There can be little doubt that SFC price guarantee commitments will result in actual outlays.

## INDUSTRY REACTION

The SFC was created to generate increased interest in synfuels commercialization by the private sector. There can be little doubt that the creation of a program which offered billions in subsidies caused many members of industry to consider the commercialization of synfuels technologies much more seriously than they had done so previously. After that increased consideration and review, almost every major energy company in the United States has rejected synfuels commercialization at this time. This is evidenced by the number of projects which collapsed when partners pulled out despite the existence of potential billions of dollars in price supports from the SFC.

- Exxon withdrew from the Colony Oil Shale Project
- Westinghouse put its entire synfuels division up for sale.
- Ashland Oil withdrew from the Breckinridge Coal Project.
- Sohio withdrew from the Hampshire Coal Project, the White River Oil Shale Project, and the Paraho-Ute Oil Shale Project.
- Mobil has abandoned efforts to form a consortium of companies to construct an oil shale project.
- Panhandle Eastern halted work on its Wycoal Project.
- EG&G abandoned its New England Energy Park Coal Project.
- Texas Eastern and W.R. Grace have halted work on projects.

The actions of industry are a strong indication of the current state of synfuels technologies. A better indication of the immaturity of the technologies can be found in statements made by representatives of industry:

- "The technical aspects, economic process, environmental controls, deployment techniques are still in their earliest stage. A lot of field work needs to be done."--Bob Shelton, Shale Energy Corporation of America.
- "I'm not saying there aren't some interesting things going on in the lab, and that's where we should be focussing our attention...We should be spending our money on improving (through lab research) the second generation of synfuels technologies, not proving to the world that the first

generation is no good."--Ted Eck, Chief Economist, Standard Oil of Indiana.

* "We're putting synfuels to bed as a major priority." --Samuel Vastola, Manager of Corporate Planning, Exxon.

* "The industry doesn't do it today because we don't have the technology nor see the market. You can see by the projects that folded, they didn't have the technology right. Demonstration-size research and development projects are a must before you move into full-scale operation."--Earl Hurst, Chevron Shale Oil Company.

## ENERGY SECURITY

The central factor behind the creation of the SFC, and the most common justification for its continued existence, is a concern for our nation's energy security. There is little doubt that the world supply of oil is limited, and the current oil glut and corresponding low relative energy prices will not last forever. The debate begins, however, when specific solutions are offered to create alternative sources of supply.

To provide energy security, an energy supply should be technically reliable, cost-effective, and environmentally acceptable. Synfuels technologies currently satisfy none of these criteria.

While it is disturbing that the current federal synfuels program appears to provide little, if any, energy security, an even more disturbing feature of the program is that it may actually be placing this country in a more insecure energy situation. This can happen in three ways: (a) The commitment of billions to the synfuels program represent an imbalanced emphasis on a single program while many other more promising federal energy programs have suffered budget cuts. (b) Huge federal subsidization of synfuels technologies creates an artificial market, and possibly will attract a substantial amount of private dollars away from more promising technologies. (c) SFC projects may very well require continued additional subsidization throughout their lives, as evidenced by the Great Plains Project, which will further place a disproportionate share of the federal energy budget on these technologies.

CONCLUSION

To date, the federal synthetic fuels commercialization program has been a failure. Poor management has exacerbated the problem, but I have avoided discussing that topic in my historical review of the program because it is not the key issue. One problem with the program results from the fact that most people assumed in 1979 and 1980 that energy prices would continue to rise. Instead, prices have leveled off and even declined. However, the fundamental problem with regard to the federal synfuels effort is the mission which the SFC was given in the first place. The Energy Security Act directs the SFC to act as an investment bank, and foster the rapid commercialization of synfuels technologies. This is where the Act was premised on a flawed assumption--it ignored the technical, economic, and environmental uncertainties which are associated with current synfuels technologies. Many say the issue is one of how to best develop a technology. However, using the SFC's own words in a written response presented to this Committee last year, "the statutory purpose of the Corporation's program is not to develop technologies but to bring those technologies that are the most mature into commercial utilization." Unfortunately, the Act did not provide an easy avenue for the Corporation to come to the obvious conclusion that the technologies do indeed need to be more fully developed before commercialization can take place.

The SFC was created in a state of panic, and the results have been disappointing. Many assumptions which were made during the creation of the corporation have proved to be false. It is clear that additional research and development is required before synfuels technologies can be utilized on a commercial scale. The history of the projects considered by the SFC and actions and statements by industry prove this to be the case. Fortunately, our current energy supply situation offers the time necessary to take these steps. Finally, the current federal budget defecit crisis demands that we reevaluate the SFC as we should all federal programs. I refer to comments made by the Chairman of this Committee in the _Energy Daily_ earlier this week with regard to a temporary halt in Strategic Petroleum Reserve purchases in light of the budget situation:

> "I think it may be tolerable in view of the economic constraints under which we are operating. It is much like talking to a life insurance salesman. If he is selling life insurance, you don't have enough. If you look at your family budget, the premiums are already as high as you can afford to pay. That's a judgemental factor. I don't think it's a black-and-white or a given."

I would submit that it is time to look at the "family budget" when considering this program, and pay a little less attention to the "insurance salesman" who consistently waves the flag of national security in defense of the SFC. It is a program which was based on false assumptions, and it is time to alter federal involvement in synthetic fuels development.

# PROPOSED FISCAL YEAR 1986 BUDGET REQUEST

**(Department of Energy)**

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MONDAY, MARCH 4, 1985

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
*Washington, DC.*

The committee met, pursuant to notice, at 10 a.m., in room SD-366, Dirksen Office Building, Hon. James A. McClure, chairman, presiding.

Present: Senators McClure, Warner, Evans, Johnston, Bumpers, Melcher, and Rockefeller.

Also present: Frank M. Cushing, staff director; Gary G. Ellsworth, chief counsel; Richard D. Grundy, senior professional staff member; D. Michael Harvey, chief counsel for the minority; Benjamin S. Cooper, professonal staff member for the minority; James T. Bruce, counsel for the minority; and Elizabeth Moler, counsel for the minority.

## OPENING STATEMENT OF HON. JAMES A. McCLURE, A U.S. SENATOR FROM THE STATE OF IDAHO

The CHAIRMAN. The committee will come to order.

Today the committee concludes 3 days of hearings on the President's fiscal year 1986 budget for programs within its jurisdiction. Our witness today is Secretary of Energy John Herrington.

I am as committed as the administration to bringing the Federal budget under control, and I sincerely hope that we will have the full support of the administration and the Department of Energy, in fulfilling our responsibilities to the American people. We are faced with difficult choices which influence the future adequacy and security of our country's energy supplies. At stake is not only the U.S. economic viability, but the daily lives and livelihoods of current and future Americans.

The Department of Energy has a special role in this regard, and there are differences of opinion on which programs of the department should be emphasized. But it is unrewarding to continue our debate of many of the same old and often unrealistic administration proposals that it has made for each of the last 4 years. Many of these proposals have been repeatedly rejected by the Congress and, I believe, by the American people; for example, phaseout of the Low-Income Weatherization and the Schools and Hospitals programs. For 4 years we have been squeezing the same programs, and while it may be possible that the Congress looks at them differently this year, I haven't yet seen that sign.

I would observe that the fiscal year 1982 budget request for the civilian programs of the Department of Energy was $8.78 billion. By comparison, after 4 years of budget cuts, the fiscal year 1986 request is $7.63 billion, a decrease of $1.15 billion, or a 13-percent reduction. Before these additional cuts can be implemented, if at all, we must fully understand their implications. I am sure that my concerns and those of the other members of the committee will quickly become evident.

For example, there is ~~the~~ Strategic Petroleum Reserve, for which the administration has proposed an indefinite moratorium on construction and petroleum acquisition. At the end of fiscal year 1985 there will be 489 million barrels in storage, which will provide an estimated 108 days of U.S. net imports. However, current law, if the fill rate drops below 100,000 barrels per day before we reach 500 million barrels in storage, then Elk Hills oil cannot be sold, and the Federal Treasury will lose approximately $1.1 billion of revenues each year. Yet sufficient funds have already been appropriated to reach the statutory limitations and thus avoid loss of these revenues.

There also are new administration proposals such as those affecting the Power Marketing Administrations, which cannot be legally implemented within the timeframe contemplated by the budget. Moreover, the associated revenue estimates ignore the economic consequences of the proposal on millions of American citizens if implemented.

Before we can proceed with the administration's latest round of budgetary proposals, we must fully understand their implications. The hearing today will be the beginning of that process in the Senate.

Senator Warner, do you have any opening statement?

Senator WARNER. No thank you, Mr. Chairman. I would just welcome the Secretary.

The CHAIRMAN. Thank you very much, Senator Warner.

At this time I would welcome before the committee the Honorable John Herrington, Secretary of the Department of Energy who is appearing before us for the first time in that capacity.

We welcome you before us. You can deliver your statement, summarize it in whatever way you wish. Your prepared statement will be made a part of the record in full, and I would invite you to introduce those who accompany you, if you desire.

## STATEMENT OF HON. JOHN S. HERRINGTON, SECRETARY OF ENERGY, ACCOMPANIED BY MARTHA HESSE DOLAN, ASSISTANT SECRETARY FOR MANAGEMENT ADMINISTRATION, DEPARTMENT OF ENERGY; AND BETTY SMEDLEY, ASSISTANT CONTROLLER FOR BUDGET, POLICY, AND COMPLIANCE, DEPARTMENT OF ENERGY

Secretary HERRINGTON. Thank you, Mr. Chairman.

The first matter I would like to take up is to introduce those accompanying me—Assistant Secretary Martha Hesse Dolan for Management and Administration in the Department of Energy, and her deputy, Betty Smedley, who have done an outstanding job in preparing this budget, and in the last 4 years in the Department in their various capacities.

I would like to take a personal note first to extend to you, to Senator Warner, and the other members of this committee, a personal thanks for the way that my confirmation hearing was handled; the professionalism, the courtesy that you showed to me and my family throughout that proceeding. It is something that I appreciate very much, as any appointee does, and you gentlemen certainly were more than adequate in your courtesies to me. So thank you.

The CHAIRMAN. I might say, Mr. Secretary, that it was our pleasure as well because it went very smoothly at every stage, and no committee ever had a more cooperative appointee than was the case in yours.

Senator WARNER. I agree, Mr. Chairman, and he earned it with a long record of hard work.

Secretary HERRINGTON. Thank you.

Well, we're going to do everything in our power to work carefully with this committee to give the country a well-run, well-organized, well-managed Department of Energy, and to cooperate with you in any programs that are laid forth for our Department to carry out.

I am pleased to come before you as the Secretary to present our fiscal year 1986 budget. These are tough times. We have a large Federal deficit that all of us are worried about and wrestling with. We also have ongoing programs that are important to the success of the administration of this Government. This particular budget as it appears before you now supports our energy policy goal—that of ensuring an adequate supply of energy at reasonable costs. It continues our commitment to meeting the needs of the Defense establishment for nuclear weapons materials, and, finally, it makes a substantial contribution to reducing the Federal deficit.

Before discussing that budget in detail, I want to comment on one particular point that I think is important, and that is the energy situation facing this Nation today because that situation is more encouraging than it has been in recent years.

Some examples: Net petroleum imports have declined from 46 percent of the total U.S. oil consumption in 1977—that was our peak year for imports—to 29 percent in 1984, excluding imports for the strategic petroleum reserve. In addition, the probability of a severe oil supply disruption is much lower today than it was in the 1970's, principally for two reasons.

First, the world dependence on Persian Gulf supplies has declined. In 1978, 44 percent of the non-Communist world's production came from the Persian Gulf. Today, only 28 percent does so. In this context, it is worth noting that only 3 percent of the total U.S. oil consumption comes from the Persian Gulf whereas 14 percent did in 1977. Second, today there is excess oil production and capacity worldwide to the extent of 10 million barrels a day. This, together with our strategic petroleum reserve [SPR] stocks, reduces the likelihood of a supply disruption.

Our oil insurance policy, the strategic petroleum reserve, will hold approximately 489 million barrels of crude oil by the end of fiscal year 1985, which is the equivalent of 108 days of net imports.

The energy situation is favorable, but we must make use of this absence of a supply crisis to lay the foundation for a secure energy future.

The fiscal year 1986 budget for the Department of Energy was developed with two goals in mind: How do we continue progress toward the goal established in the fourth national energy policy plan of achieving an adequate supply of energy at reasonable costs, and how do we at the Department of Energy contribute to the Government wide goal of reducing the Federal deficit by limiting Federal expenditures?

I believe we have succeeded in both. The fiscal year 1986 budget is almost $12.5 billion, approximately $1.9 billion below fiscal year 1985. Consequently, the contribution that Department of Energy reductions are making toward the deficit reduction goes far beyond merely freezing at current levels. The most important element of difference between this budget and last year's budget results from our decision to propose to you a moratorium on further filling of the strategic petroleum reserve.

Before going any further, I would like to discuss this decision with you. I have already described our much-improved energy situation relative to the days when we were heavily dependent on energy supplies from potentially unstable sources of supply and when the cartel pricing could be imposed and maintained.

In 1978, when the 750-million-barrel SPR implementation plan was approved, the projection of daily net oil imports in 1985 ranged from between 7 and 11.5 million barrels, which meant that a 750-million-barrel reserve would hold the equivalent of 65 to 107 days worth of net imports. Today, based upon the most recent estimates of our import levels, the 489-million-barrel reserve we expect at the end of 1985 will hold the equivalent of 108 days of net imports. Consequently, we can maintain an equivalent level of protection while saving the taxpayers an estimated $8 billion between fiscal year 1986 and fiscal year 1990, should we choose to extend the moratorium.

Our proposal at this point is only for a 1-year moratorium. This level of protection, the much reduced likelihood of a major supply interruption, the substantial excess oil production capacity, and the sizable contribution to deficit reduction appear to us to justify the proposal of a moratorium on further fill and development of the SPR.

We are budgeting about $175 million in fiscal year 1986 for maintaining the SPR in a standby readiness mode. We are deferring about $272 million of prior year facilities appropriations, a portion of which will finance the fiscal year 1986 program. We will also defer about $827 million of previously appropriated oil acquisition funds which will remain available for future use.

I would like to highlight a few of the selected program areas if I could. The budget for uranium enrichment activities is $1.6 billion, down slightly from fiscal year 1985. We plan to produce about 8 million SWU's compared to the 10.4 million SWU's in 1985. The Department is going to select either the advanced gas centrifuge or laser isotope separation as the primary future enrichment technology, and a business strategy will have to be developed which will project demand, establish a marketing program, and select the production strategy that we will use in future years.

Turning to general science, our request, which includes high energy physics and nuclear physics, is $685 million, about 6 percent below fiscal year 1985. The reduction is due principally to reduced construction funding requirements. We will continue R&D on the advanced accelerator concepts and on the superconducting magnets for the design of a possible next generation particle accelerator, the superconducting super collider. The project definition on the continuous electron beam accelerator facility [CEBAF] at Newport News will continue, so that construction of CEBAF could begin in fiscal year 1987.

The budget for atomic energy defense activities is $8 billion, up a little less than 10 percent from fiscal year 1985. This budget permits us to meet the requirements of the Department of Defense for weapons production and deliveries and for special nuclear materials.

We also have research activities supporting the strategic defense initiative budgeted at $282 million. That is up $72 million from fiscal year 1985. Production and preproduction efforts in fiscal year 1986 will involve 12 weapons systems, including the warheads for PERSHING II, air-, sea-, and ground-launched cruise missiles, the MX Peacekeeper, and the Trident II.

Turning to solar, our solar and other renewable energy budget is below fiscal year 1985, although we continue program activities in each major technology area. The focus in fiscal year 1986 is on completing the ongoing longer term research activities that support private sector efforts to develop these sources as competitive energy supply options.

Renewable technologies have substantial potential, and there have been a number of encouraging developments.

The Department's nuclear energy programs have been reoriented in the wake of termination of the Clinch River breeder reactor. We are now concentrating on developing base technology for all classes of reactors, including advanced converters and advanced breeders. We are looking at simplified modular designs with passive safety features and improved economic performance.

The budget for Basic Energy Sciences is $410 million, only 3 percent below fiscal year 1985. Support of this program is evidence of the Department's commitment to emphasizing longer range basic research rather than near term development which industry should support.

The magnetic fusion budget is $390 million. That is about 10 percent below fiscal year 1985. We are continuing to reorient this program toward understanding the basic scientific and technical components of a complete fusion system. Although the program's pace and priorities have changed, we view fusion as a candidate for a major new energy source in the next century.

The Department views conservation as an important energy resource also, and we want to make and continue to make important contributions to this Nation's improved energy posture. Our conservation budget covers two distinct activities, research and development and grants to States. Conservation research and development is modestly below 1985. The budget for conservation grants is $226 million, a 20 percent reduction from fiscal year 1985. This represents the first year of a 5-year program to develop alternative financing techniques which will draw upon private sector resources, increase participation by community groups, State and local governments, and phase out Federal support for these grant programs.

Last year we proposed to fund two of the grant programs, the low income weatherization and the schools and hospitals, from funds recovered by the Government from alleged violations of oil pricing regulations. Congress did not act on our request. This year we would like to propose similar legislation. Our potential recoveries on the settlements are still estimated at the $6 billion range.

Fossil fuels accounted for about 90 percent of the energy consumed in the United States, and coal is our most abundant fossil resource. However, it only accounted for about 22 percent of our total energy consumption. Our program is geared towards establishing an adequate scientific and engineering knowledge base and to support the private sector efforts, and to deploy economically competitive techniques.

The fiscal year 1986 program for fossil energy is $243 million. That is $104 million below fiscal year 1985. The reductions have come primarily from activities and projects where private sector initiatives are expected, such as the phosphoric acid fuel cells, and MHD, where the high costs of further development have required that the Department offer experimental facilities and equipment in lieu of direct funding.

Mr. Chairman, these are only the highlights of what I think you will agree is a complex and difficult budget. We have made substantial contribution to the deficit reduction, and we do not feel we have jeopardized our strategy of pursuing a mix of energy technologies.

I am going to submit a full statement for the record, with the consent of the committee, a statement that we have worked hard on to try to set out our goals and policy directions that we are attempting to implement in this next year.

I would be pleased to attempt to answer any questions the committee may have at this time.

[The prepared statement of Secretary Herrington follows:]

## Statement of John S. Herrington
## Secretary of Energy
## FY 1986 Budget Overview

Mr. Chairman and Members of the Committee, I appreciate the opportunity to present to you the FY 1986 budget for the Department of Energy. This budget supports our energy policy goal of fostering an adequate supply of energy at reasonable costs and continues our contribution to the National defense, while at the same time contributing to our objective of reducing the Federal deficit. Before discussing the budget itself, I would like to comment on the management and organization of the Department of Energy, and summarize the current energy situation.

### MANAGEMENT AND ORGANIZATION

The Department of Energy has a broad statutory mandate to carry out important activities in the areas of National Defense, Energy, and General Science. As Secretary of Energy, I will provide vigorous leadership to ensure that the Department performs its missions effectively and efficiently. As requested, I intend to evaluate the Department's programs and organization and report back to the President with my views on his options for the future. This would include recommendations of changes, if any, that I believe should be made with respect to organization and/or management of energy programs at the Federal level. It is also my intention to consult fully with the Congress on these matters.

### CURRENT ENERGY SITUATION

I am pleased to report that the energy situation facing the Nation today is an encouraging one. Despite strong economic growth in 1984, it is estimated that total energy consumption in that year was close to that of 1973, and was far below what pre-1973 trends would have produced had those trends continued. Yet economic output over the same period of time continued to expand. To illustrate the gains in economic and energy efficiency we achieved over that period, the amount of energy required to produce a constant dollar of gross national product has declined by more than 20 percent since 1973.

Another aspect of our improved energy situation is the dramatic reduction over the past few years in petroleum imports. Net petroleum imports have declined from 46 percent of total U.S. oil consumption in 1977, the peak year for imports, to 29 percent in 1984. President Reagan's complete decontrol of domestic oil prices was a major factor in encouraging domestic oil production and reducing U.S. dependence on foreign oil.

In addition, the probability of a severe oil supply disruption is much lower today than it was in the 1970's. Two major developments in the world oil market caused this reduced vulnerability. First, worldwide dependence on oil from the Persian Gulf has declined precipitously. In 1978, Persian Gulf producers accounted for 44 percent of non-communist world production. Today they account for only 28 percent. Second, there is 10 million barrels per day of excess oil production capacity worldwide, which, together with our Strategic Petroleum Reserve stocks, serves to reduce the likelihood of a supply disruption.

Our oil "insurance policy," the Strategic Petroleum Reserve, will contain about 489 million barrels by the end of FY 1985, which is the equivalent of 108 days of net petroleum imports. Clearly, we are much less vulnerable today to a supply disruption than we were when the Department of Energy was established.

Although the news is good, we must not succumb to complacency. The international economy is heavily interdependent, and most of our trading partners are far more vulnerable to supply disruptions than we are. A major crisis in international energy markets would be felt here. The prudent policy for the Department of Energy to follow is to continue efforts to minimize federal control and involvement in energy markets while maintaining public health and safety and environmental quality, and to continue to promote the Nation's development of a balanced and mixed energy resource system, which can contribute to a secure energy future. The Department of Energy's FY 1986 budget is fully responsive to that policy.

## BUDGET OVERVIEW

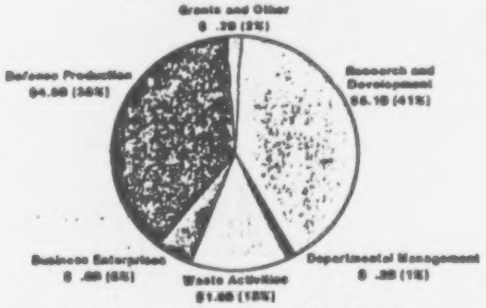
The FY 1986 budget for the Department of Energy was developed with two goals in mind -- to continue progress toward the goal established in the Fourth National Energy Policy Plan of achieving an adequate supply of energy at reasonable costs, and to contribute to the government-wide goal of reducing the deficit by limiting Federal expenditures. This budget succeeds in meeting both objectives. It continues the program strategy of seeking a balanced and mixed energy resource base by supporting promising avenues of research in a wide variety of technology areas, while making a substantial contribution to deficit reduction. To ensure maximum economic efficiency, the Department is seeking improved international collaboration in major energy research and development programs.

The FY 1986 budget is almost $12.5 billion, approximately $1.9 billion less than FY 1985, and more than $3.0 billion below what our budget would have been had we continued the FY 1985 level of services without change. Anticipated outlays in FY 1986 are $12.0 billion.

Most of the reduction from the FY 1985 appropriated level results from the decision to propose a moratorium on further development and fill of the Strategic Petroleum Reserve. The remainder of the reduction is the net result of a number of program budget decisions, plus the application of cost-saving management reforms and a 5 percent pay reduction for Federal employees.

In presenting the Department's budget, we have divided it into six categories. Each category groups activities which share common characteristics.

**FY 1986 Budget Summary**
**(Dollars in Billions)**



**Total Budget Authority $12.5 Billion**

Research and Development programs constitute the largest portion of the budget; $5.1 billion, or 41 percent of the total budget request. This grouping combines civilian and defense programs which share research and development as a common thread. Research and development programs are down about 2 percent from FY 1985. This is the net effect of decreases to most civilian energy and general science programs, which more than offset increases to weapons research, development and testing and Naval reactors development.

In developing our budget for energy research and development programs, we concentrated resources on activities appropriate to the Federal government which are consistent with our strategy of promoting a balanced and mixed energy resource system. Emphasis is applied chiefly to the most essential longer-term research and development, leaving nearer-term engineering development and commercial application to the private sector.

Defense Production and Support accounts for $4.8 billion, or 38 percent of the total budget. This program category includes production of nuclear weapons and special nuclear materials in support of Department of Defense requirements, plus supporting programs. Funding is up 14 percent from FY 1985, reflecting the Department of Defense's increased requirements for weapons systems and for the production of special nuclear materials for use in weapons systems and the nuclear Navy.

Waste Activities includes all programs involved with civilian and defense nuclear waste, including research and development on waste handling and disposal technologies, permanent geologic disposal programs, and remedial actions at contaminated Department of Energy and certain non-government facilities. We are requesting $1.6 billion for these activities in FY 1986, an increase of $295 million, which is primarily in the Nuclear Waste Fund and Remedial Action. In FY 1986, we anticipate collecting $401 million in fee revenue to help finance Nuclear Waste Fund activities.

A number of the Department's activities resemble businesses, in that they generate revenues or, as in the case of the Strategic Petroleum Reserve, maintain an inventory of crude oil which could be sold to the highest bidders in the event of a major supply disruption. In this category of business enterprises we include the Strategic Petroleum Reserve (SPR), the Naval Petroleum and Oil Shale Reserves, the Power Marketing Administrations, and the Uranium Enrichment activity. The budget request for business enterprises is $554 million. This is considerably less than the $2,970 million in FY 1985, which included $2,050 million for SPR oil acquisition and transportation, primarily because of a proposed moratorium on continued development and fill of the Strategic Petroleum Reserve, which I will discuss in detail later.

The revenues from these activities, which either offset the budget request, as is the case with uranium enrichment revenues, or are deposited in the Treasury, are expected to total approximately $4.1 billion.

The FY 1986 budget proposes changes in the investment repayment practices of the Power Marketing Administrations, which has the effect of increasing the revenue estimates from these sources. Our proposal calls for repayment of the unpaid balance of the original federal investment on a straight-line amortization schedule, with interest on the unpaid balance matching the current cost of Treasury long-term borrowing, rather than the low rates in effect when the investment was first authorized. These changes are intended to protect the interests of the Nation's taxpayers, as the interest rates will reflect the current cost of money to the Government.

We are requesting approximately $344 million for conservation grants and regulatory and energy information programs in FY 1986. We propose to offset the $191 million budget request for the weatherization and schools and hospitals conservation grants with funds recovered by the government from alleged petroleum pricing and allocation violations which took place during the period of oil price controls. This offset reduces our request for new budget authority for conservation grants and regulatory and energy information programs to $153 million. We introduced legislation last year to make use of these oil overcharge funds but it failed to gain Congressional approval. Similar legislation will be introduced this year.

The last major category is Departmental Management, which includes headquarters and field overhead activities. There is relatively little change from FY 1985.

I now would like to discuss the funding requests for selected major programs.

## STRATEGIC PETROLEUM RESERVE

As previously mentioned, the most dramatic difference between this budget and those of prior years results from our not requesting new budget authority for the Strategic Petroleum Reserve (SPR). We are proposing an indefinite moratorium on further filling and facilities development at the end of FY 1985, when the Reserve will hold approximately 489 million barrels of crude oil in storage. As a deficit-reducing measure, this action is expected to reduce budget outlays by $8 billion between FY 1986 and FY 1990, if the moratorium is continued for five years.

We can propose this moratorium because world oil market conditions and our own and our allies' abilities to deal with oil supply disruptions are much better than they were when the 750 million barrel SPR implementation plan was proposed in 1978. At that time, the projection of daily net oil imports in 1985 ranged from 7 to 11.5 million barrels, which meant that a 750 million barrel reserve would hold the equivalent of 65 to 107 days worth of net imports.

Today, based upon the most recent estimates of our import levels in 1985, a 489 million barrel reserve will hold the equivalent of 108 days of net imports. Consequently, we can maintain an equivalent level of protection while saving the taxpayers a significant amount of money through this moratorium. Further, reduced reliance on oil imports from potentially unstable sources, the substantial excess oil production capacity which I mentioned earlier in my statement, and the elimination of government controls on oil markets, make a 1973-type "embargo" very unlikely.

We are budgeting $175 million in FY 1986 for activities necessary to maintain the SPR in a standby readiness mode. In 1985, we will defer about $272 million of prior year appropriations for facilities development, and a portion of these deferred funds will be used to finance our FY 1986 expenditures. We will also defer about $827 million of previously appropriated funds for oil acquisition and transportation, which will remain available for future use.

## URANIUM ENRICHMENT

The budget for uranium enrichment activities is $1.6 billion, down slightly from FY 1985, and is offset by revenues in the same amount. Production of 8 million separative work units (SWUs) in FY 1986 is the program goal, compared to FY 1985's estimated production of 10.4 million SWUs.

The FY 1986 budget request has been developed around the Department's best estimate of its share of the international market for enriched uranium, and with strict attention to cost control. Customer receptivity to the Utility Services enrichment contract introduced in January, 1984, has been excellent, but actual customer demand depends in part on the degree to which certain conversion features of the contract are utilized.

The direction and composition of the Uranium Enrichment program should be much clearer in May, 1985. At that time the Department will select either advanced gas centrifuge or atomic vapor laser isotope separation as the primary advanced enrichment technology, and will issue a comprehensive business strategy which will set forth projected future demand for enriched uranium, the marketing program for maintaining or increasing market share, and the selected production strategy for meeting anticipated production requirements. Also, the business strategy document will contain a plan for repayment of the Government's investment in the enrichment enterprise.

## GENERAL SCIENCE

The General Science appropriation consists of High Energy Physics and Nuclear Physics programs, which are a major part of the National effort to identify the basic constituents of matter and the basic forces in nature. These activities have in the past not only led to the advancement of science, but also contributed to the scientific foundation for the development of advanced energy technologies.

The budget request is $685 million. This is about a 6 percent reduction from FY 1985, which is largely attributable to reduced construction requirements, as a number of major accelerator and colliding beam projects will have funding completed in 1985 or will have modest construction funding requirements in FY 1986.

For example, funding for Tevatron II is now complete, and we will complete the funding of the Stanford Linear Collider and Tevatron I in FY 1986 at a total cost of $31.5 million, whereas these projects required nearly three times that funding in FY 1985.

We will continue research on advanced accelerator concepts and superconducting magnets required for the design of a possible next generation high energy particle accelerator (Superconducting Super Collider). We will also complete project definition efforts in support of future construction of the Continuous Electron Beam Accelerator Facility (CEBAF) project at Newport News, Virginia, so that construction of CEBAF could be initiated in FY 1987.

## DEFENSE ACTIVITIES

The FY 1986 budget request for Atomic Energy Defense Activities is $8,047 million, an increase of less than 10 percent from FY 1985. The request meets the requirements of the Department of Defense for weapons production and deliveries. It also includes research on new and improved weapons, testing, production of special nuclear materials, and Naval reactors development.

Within Weapons Activities, production and predelivery production efforts will involve twelve weapons types, including warheads for the Pershing II, air, sea, and ground-launched cruise missiles, the MX Peacekeeper, and the Trident II.

Research in support of the Strategic Defense Initiative is budgeted at $282 million, an increase of $72 million from FY 1985. The budget also includes $80 million for research and development and conceptual design on the special isotope separation process using lasers to separate plutonium for use in nuclear weapons.

Within the Defense Waste and Byproducts Management program, FY 1986 highlights include continuation of the program to transfer high-level waste from old single-shell tanks at Savannah River and Hanford into new double-shell tanks. This budget provides also for continued construction of the Defense Waste Processing Facility at Savannah River, and preparation for operation of the Waste Isolation Pilot Plant at Carlsbad, New Mexico.

The Naval Reactors Development program designs, develops, tests, and ultimately disposes of naval nuclear propulsion reactor components and cores. The FY 1986 budget is $569 million, up from $497 million in FY 1985. This increase is due primarily to increased research and development on an Advanced Fleet Reactor and for increased servicing requirements for the eight land-based prototype reactors.

## RENEWABLE ENERGY

The focus of the Solar and Other Renewable Energy program in FY 1986 is on continuing ongoing, longer-term research activities that support private sector efforts to develop these resources as competitive energy supply options. Our budget continues program activities in each major solar and renewable technology area, but at levels somewhat below 1985, as we continue to concentrate on longer-term research which provides a technology base for private sector development activities.

Renewable energy technologies show substantial potential across virtually the entire energy market. For example, the cost of solar photovoltaic-generated electricity was cut by more than half between 1980 and 1983, and the manufacture and sale of photovoltaic modules increased dramatically over the same period. More than 700,000 active solar systems have been installed for water heating. This is clear evidence of the significant private sector interest and investment in renewable resources that our own long-term research and development efforts are meant to complement and support.

## NUCLEAR ENERGY

The Department's Nuclear Energy programs have been reoriented following the termination of the Clinch River Breeder Reactor demonstration project. Our civilian reactor development activities are now concentrated on developing base technology for all classes of reactors, including advanced converter and advanced breeder reactors. Improved economic performance, simplified, modular designs, passive safety features, and factory rather than on-site fabrication are being examined. The Improved Light Water Reactor Technology program seeks to resolve technical problems of light water reactors in a cooperative effort involving private industry and other government agencies. Data acquisition and evaluation from the Three Mile Island reactor is an element of this program.

In addition to activities concerning civilian reactor development, the Department also funds an Advanced Nuclear Systems program which develops space power systems for the National Aeronautics and Space Administration.

The Remedial Action program budget is $233 million, well above the $160 million in FY 1985. This program seeks to treat or stabilize radioactive wastes and perform decontamination and decommissioning activities at contaminated DOE and certain non-governmental facilities and sites. The sharp increase in funding is largely in the cleanup of inactive uranium mill tailings sites, as the work begins to change from site evaluation and planning to actual cleanup activities.

## ENERGY RESEARCH

The mission of the Basic Energy Sciences (BES) program is to perform long-term, high-risk basic research to develop the scientific and technical knowledge base underlying future energy technologies. The FY 1986 budget is $410 million, approximately 3 percent below FY 1985. Support of this program is evidence of the Department's commitment to emphasizing longer-range basic research rather than near term development which industry should support.

Within BES, Materials Sciences is the largest subprogram. FY 1986 funds will continue construction of the Center for Advanced Materials at the Lawrence Berkeley Laboratory, and upgrades at the National Synchrotron Light Source at the Brookhaven National Laboratory and at the Stanford Synchrotron Radiation Laboratory. Other major program elements include Chemical Sciences, Nuclear Sciences, Applied Mathmatical Sciences, Biological Energy Research, Advanced Energy Projects, and Engineering and Geosciences.

The Magnetic Fusion program is budgeted at $390 million, about 10 percent below the FY 1985 level. This decrease permits continuation of the process begun last year of reorienting the program toward understanding the basic scientific and technological aspects of a complete fusion system. Although the program's pace and priorities have changed, the Department still views fusion as a candidate for a major new energy source in the next century. Fusion has many potentially favorable attributes, including inherent safety and relatively few environmental problems.

The Biological and Environmental Research FY 1986 budget request is $186 million. This program represents the Nation's only long-term research effort specifically focused on energy-related health and environmental issues. The FY 1986 program will continue to concentrate on long-term health and environmental responses to both acute and chronic exposure to radioactive and energy-related chemicals, and on development of new isotopes, compounds, and clinical procedures for various applications.

## CONSERVATION

The Department of Energy views conservation as an energy resource, and end-use conservation and improved energy efficiency in homes and businesses in the private sector have made important contributions to this Nation's improved energy posture. The Department's Conservation appropriation covers two distinct activities: research and development on conservation technologies, and grants to State and local governments for conservation measures.

The conservation research and development budget is modestly below the FY 1985 level, but increases are proposed in the Industrial Process Efficiency and Waste Energy Reduction program areas of Industrial Conservation and in the generic research activities conducted in the Energy Conversion and Utilization Technologies (ECUT) program area of Multi-Sector activities. Within the ECUT program, increased emphasis is being applied to high temperature materials research with improved energy conversion systems as potential applications, and to bioprocess engineering, with the goal of establishing the engineering base for biochemical production of industrial chemicals. This change in the Conservation research and development program needs to be seen in light of the continuing efforts of the private sector to develop more energy-efficient technologies.

Conservation grant programs include Weatherization Assistance, Schools and Hospitals, the State Energy Conservation program, and the Energy Extension Service. The FY 1986 budget request for these programs is $226 million, a 20 percent decrease from FY 1985. This represents the first year of a five year program to develop alternative financing techniques which will draw on private sector resources, increase participation by community groups and State and local governments, and phase out Federal support for these grant programs.

Last year, the Department proposed to fund the Weatherization and Schools and Hospitals grants from monies recovered by the government from alleged violations of oil pricing and allocation controls under the Emergency Petroleum Allocation Act of 1973. Congress did not act on this measure, and a similar legislative proposal will be submitted this year.

## FOSSIL ENERGY

Fossil fuels accounted for about 90 percent of the energy consumed in the United States in 1983, although coal, our most abundant fossil fuel resource, accounted for only 22 percent of total energy consumption. The Department's Fossil Energy program is geared toward establishing an adequate scientific and engineering knowledge base to support private sector efforts to develop and deploy technologies that improve the economic competitiveness of those fuel resources. The Department's efforts in this regard complement those of the private sector and of the multibillion dollar Synthetic Fuels Corporation. The strategic objectives of the Fossil Energy program are to eliminate or reduce technical obstacles that currently reduce the economic contributions of coal and fossil resources by improving gas and oil recovery methods and by production of liquid and gaseous fuels from coal, shale, and tar sands.

The FY 1986 Fossil Energy program budget is $243 million, $104 million below FY 1985. The budget provides a balanced program which addresses the longer-term research requirements which the fossil industry could not reasonably be expected to support. The reductions have been taken primarily in activities and projects such as demonstration of phosphoric acid fuel cells where private initiatives should be forthcoming, and magnetohydrodynamics, where the high costs of further development have necessitated that the Department offer experimental facilities and equipment in lieu of direct funding.

## NUCLEAR WASTE FUND

The Nuclear Waste Fund Activities are budgeted at $572 million in FY 1986, well above FY 1985's $328 million. These funds are directed toward disposal of commercial spent nuclear fuel and high-level radioactive waste in mined geologic repositories, and for the study of monitored retrievable storage. The fund is financed by fees collected from nuclear utilities. In 1986, $401 million in fee revenue is expected. The program is progressing toward initial operation of the first repository in 1998. This year, three sites will be recommended for site characterization activities. The detailed site characterization activities are to begin in FY 1986. The President will recommend a site for the first repository in 1991, with initial operation in 1998.

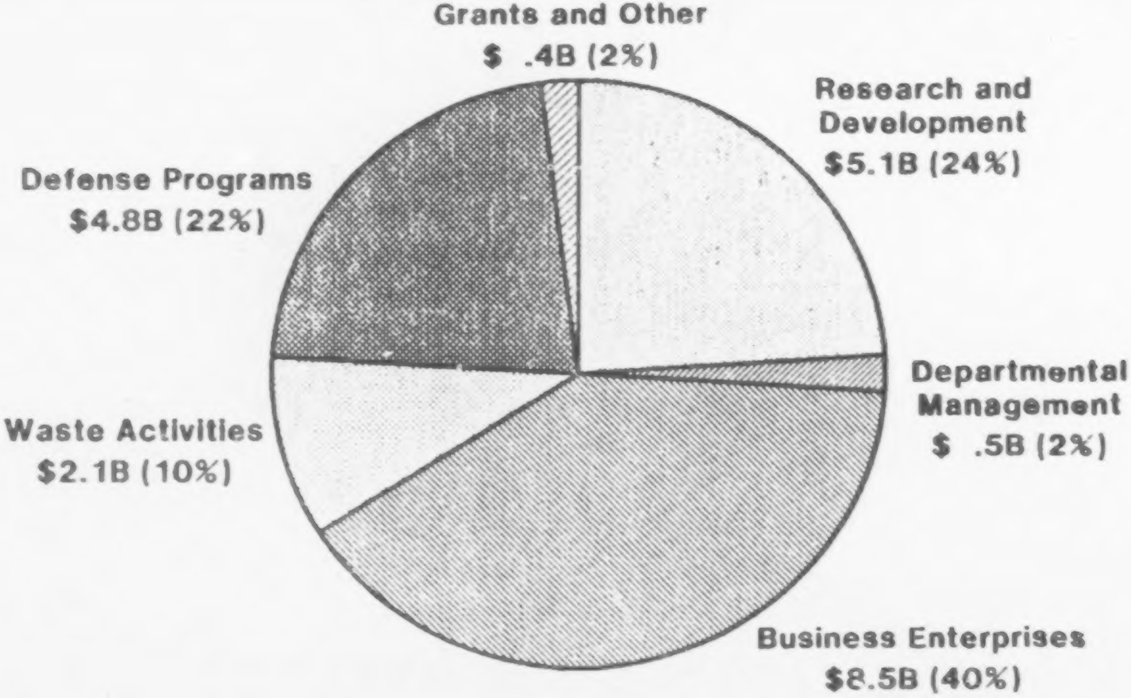
The Department is also engaged in activities leading to a second repository. In FY 1986, potentially acceptable sites will be identified in crystalline rock regions.

Mr. Chairman, that concludes my prepared statement. I would be happy to entertain your questions at this time.

# Department of Energy
# FY 1986 Budget

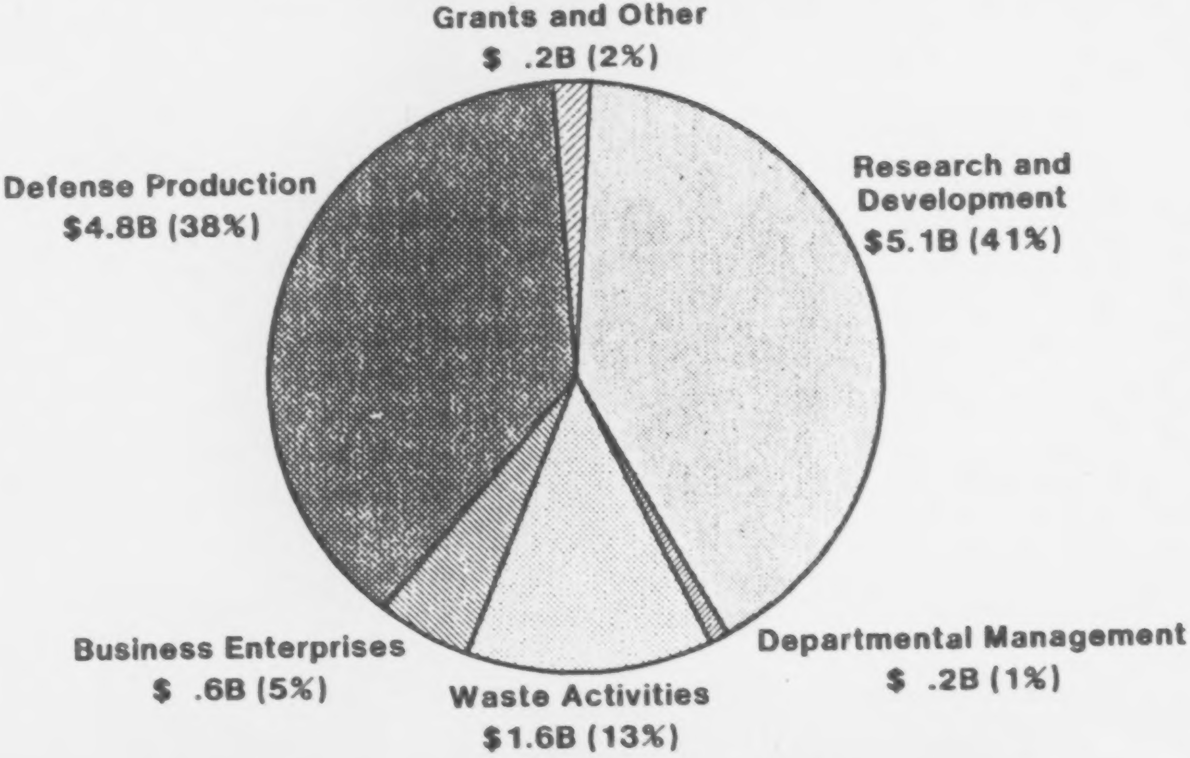
# Summary

# FY 1986 Resource Summary (Dollars in Billions)



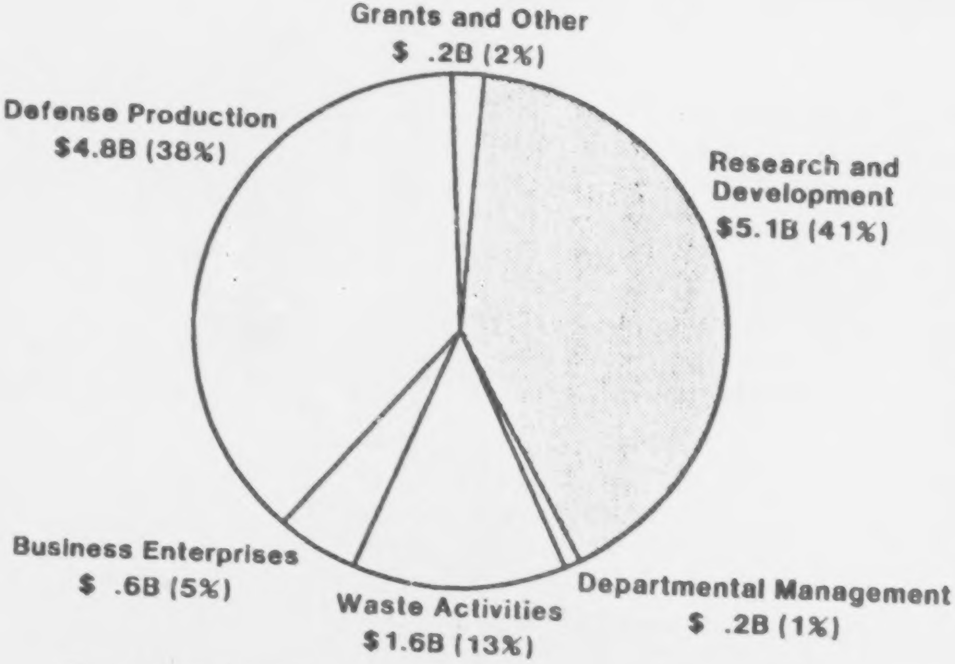
Total Budget Resources $21.4 Billion

# FY 1986 Budget Summary
# (Dollars in Billions)



**Total Budget Authority $12.5 Billion**

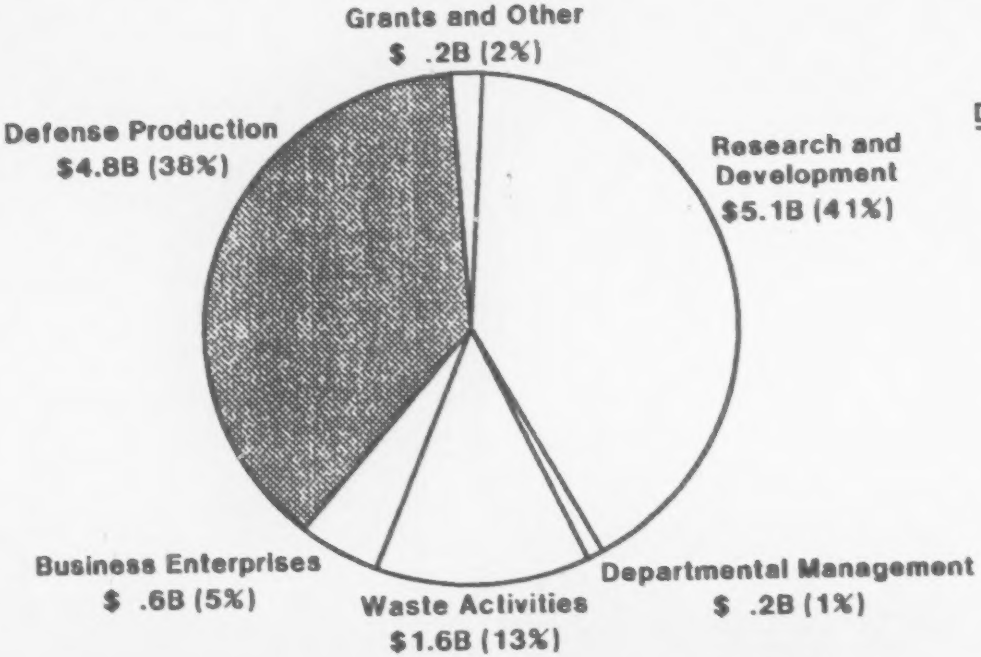
# FY 1986 Budget Summary
# (Dollars in Billions)



**Total Budget Authority $12.5 Billion**

| Research and Development: | |
|---|---|
| Solar and Renewables | $ .2 |
| Nuclear | .4 |
| Magnetic Fusion | .4 |
| Energy Research and Other Energy Supply R&D | .7 |
| General Science | .7 |
| Fossil Energy | .2 |
| Conservation R&D | .1 |
| Weapons R&D | 1.2 |
| Weapons Testing | .7 |
| Naval Reactors Development | .5 |
| Total, Research and Development | $ 5.1 |

# FY 1986 Budget Summary
# (Dollars in Billions)

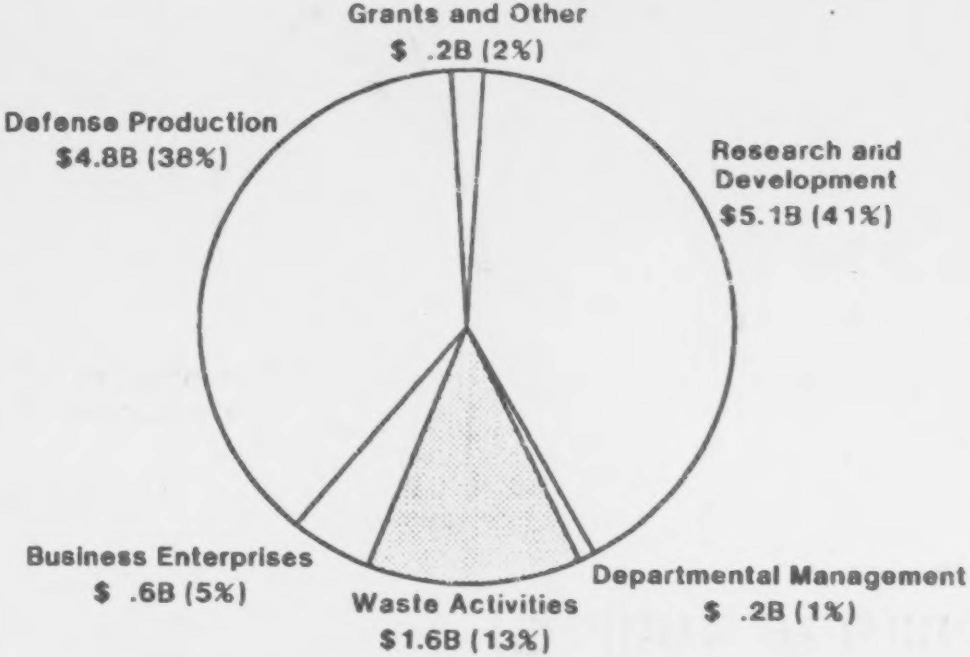


**Total Budget Authority $12.5 Billion**

**Defense Production:**

| | |
|---|---|
| Weapons Program Direction | $ --- |
| Production and Surveillance | 2.6 |
| Verification and Control Technology | .1 |
| Materials Production | 2.0 |
| Safeguards and Security Investigations | .1 |
| Total, Defense Production | $ 4.8 |

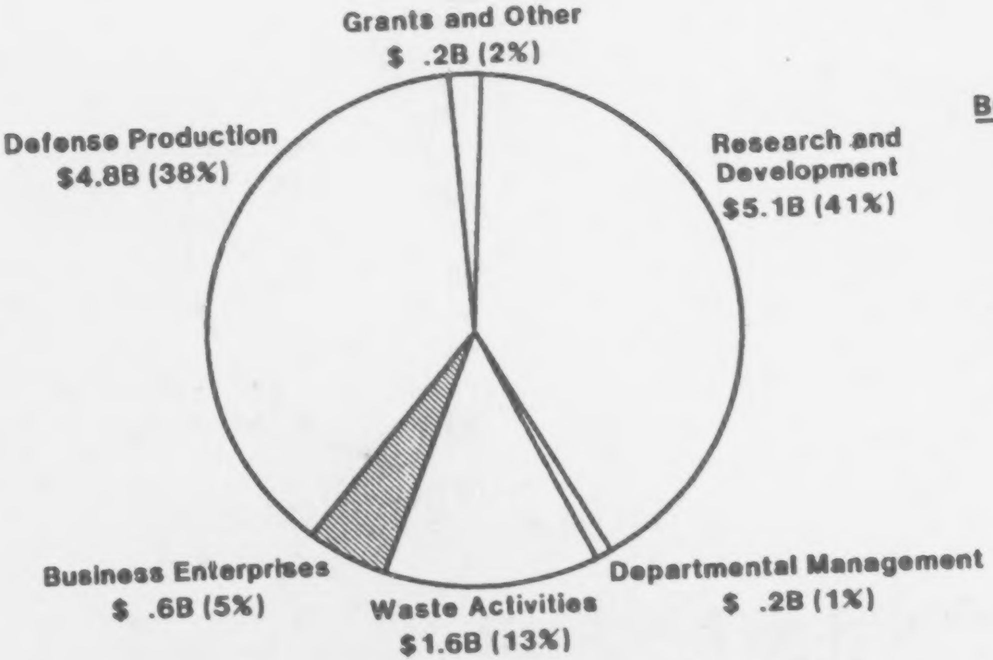
# FY 1986 Budget Summary
# (Dollars in Billions)



**Total Budget Authority $12.5 Billion**

| Waste Activities: | |
|---|---|
| Nuclear Waste Fund | $ .6 |
| Defense Waste and By-Products Management | .7 |
| Remedial Actions | .2 |
| Other Waste Activities | .1 |
| Total, Waste Activities | $ 1.6 |

# FY 1986 Budget Summary (Dollars in Billions)

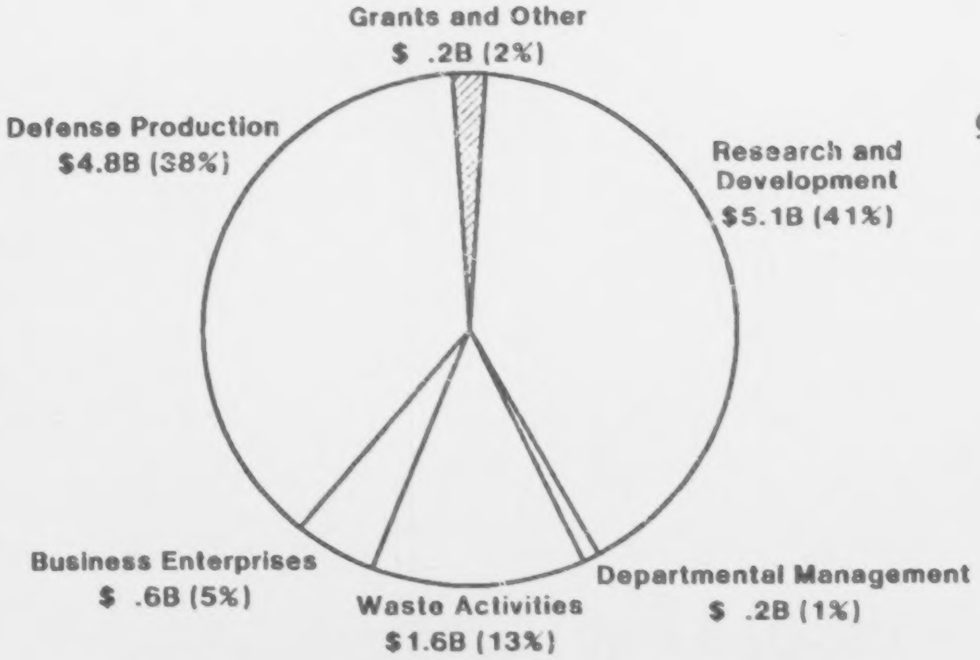


**Total Budget Authority $12.5 Billion**

**Business Enterprises:**

| | |
|---|---|
| Power Marketing | $ .5 |
| Uranium Enrichment | --- |
| Naval Petroleum Reserves | .1 |
| Strategic Petroleum Reserve | --- |
| Total, Business Enterprises | $ .6 |

# FY 1986 Budget Summary (Dollars in Billions)

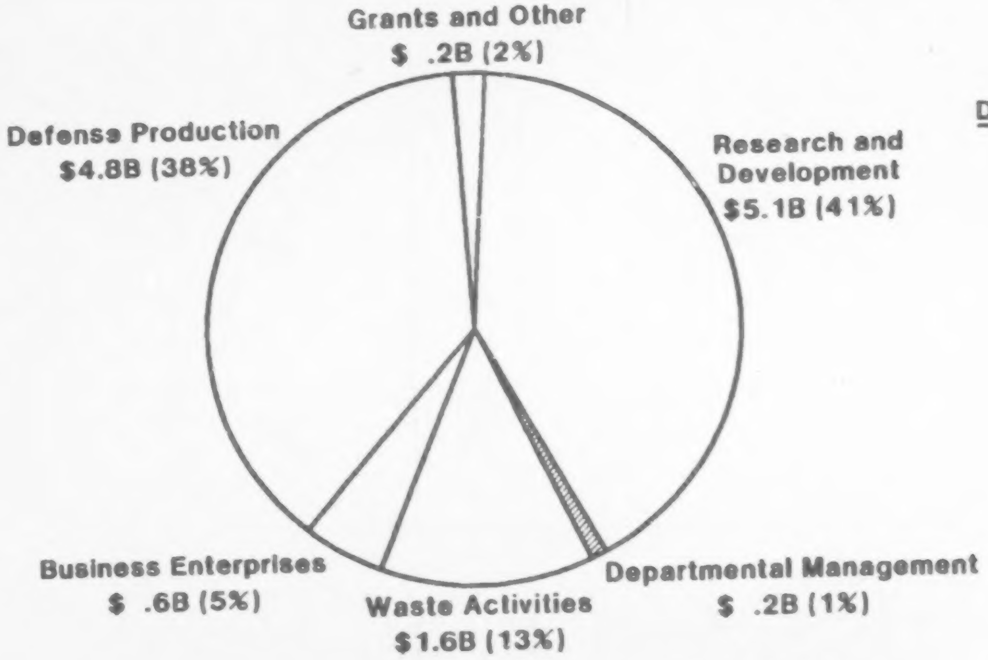


**Total Budget Authority $12.5 Billion**

Grants and Other:

| | |
|---|---|
| Conservation Grants | $ .2 |
| Information, Regulation and Emergency Preparedness | .2 |
| Less Use of Oil Overcharge Funds | - .2 |
| Total, Grants and Other | $ .2 |

# FY 1986 Budget Summary
(Dollars in Billions)

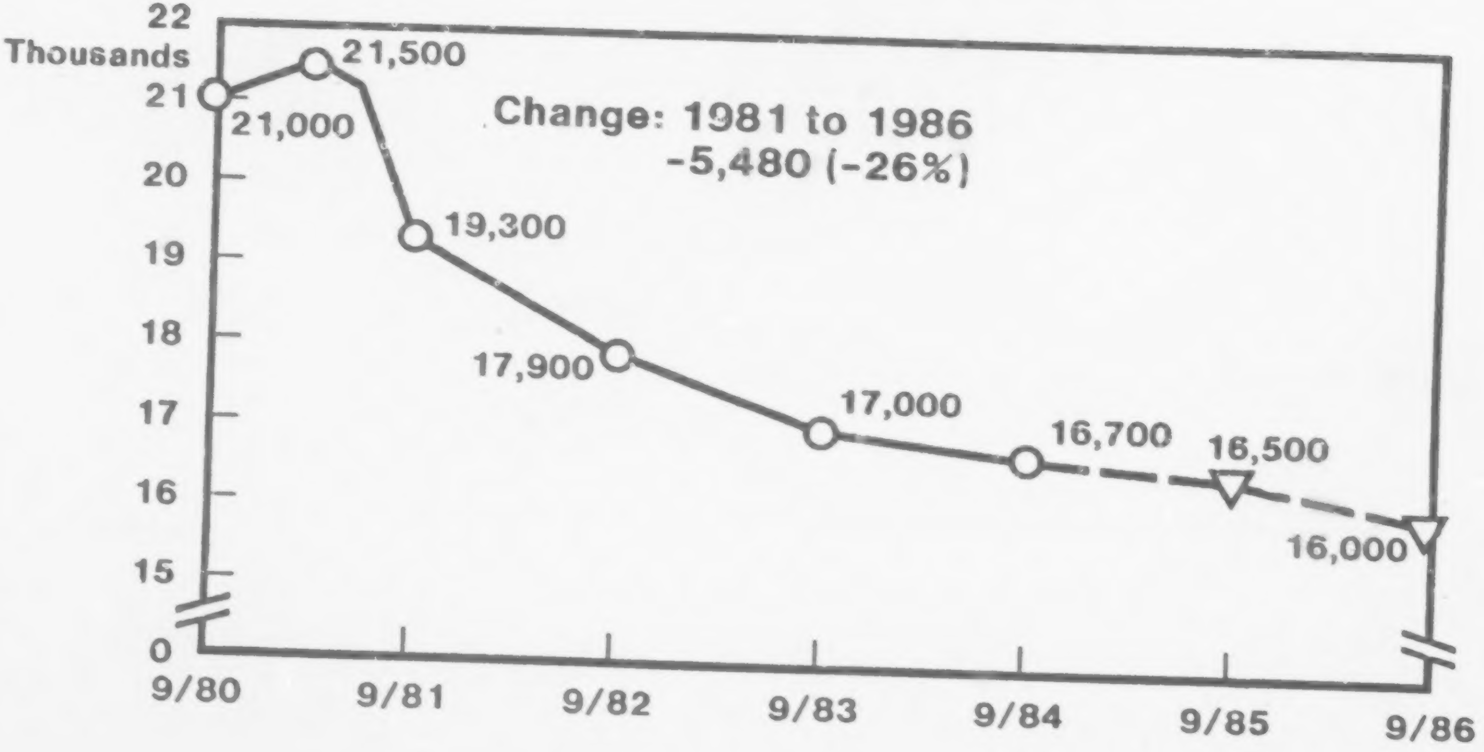


**Total Budget Authority $12.5 Billion**

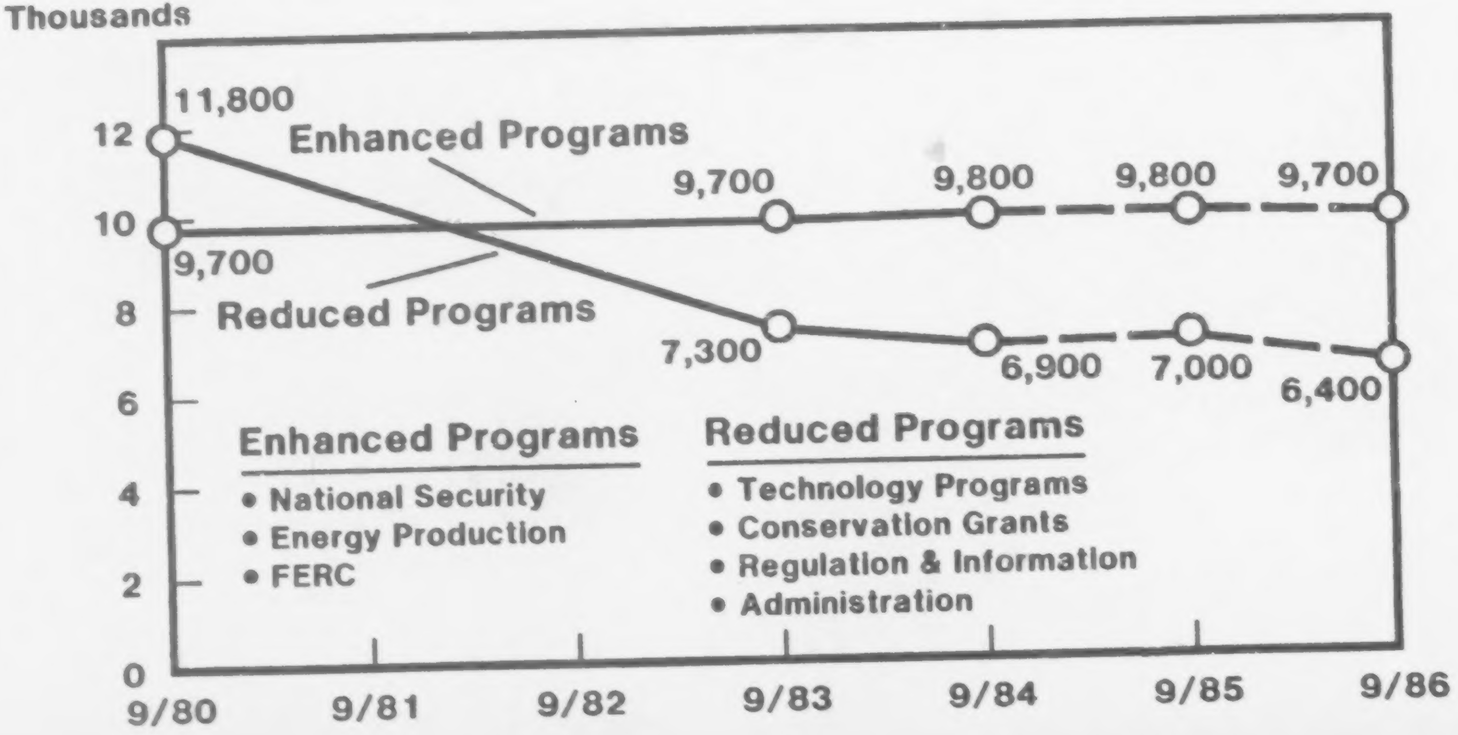
**Departmental Management:**

| | |
|---|---|
| Headquarters | $ .1 |
| Operations Offices | .1 |
| Total, Departmental Management | $ .2 |

# Department of Energy
# Total Staffing



# DOE 1986 Budget Staffing Summary



Items Requiring Legislation
FY 1986 Congressional Budget

Attachment A

| Program | Items Requiring Legislation | Status |
|---|---|---|
| Uranium Supply and Enrichment Activites | Repayment of government investment in enterprise facilities | Await May 1985 business strategy decision. |
| Energy Conservation Appropriation | Utilize petroleum overcharge money - State grants - | General Counsel is developing legislation. |
| Energy Information Administration | Financial Reporting System (FRS) | General Counsel is developing legislation. |
| Power Marketing Administration | Repayment reform | General provisions have been included in proposed Energy and Water Development Appropriation Language to implement. |
| Power Marketing Administration | Sale of Alaska Power Administration to the State of Alaska | General Counsel is developing legislation. |
| Strategic Petroleum Reserve/Naval Petroleum Reserve | SPR crude oil storage capacity capacity of less than 500M barrels or acquisition, transportation, and injection activities for the reserve are being undertaken for that fiscal year at a level sufficient to assure that crude oil in storage in SPR will be increased at an average rate of at least 100,00 BPD for that fiscal year. | Energy Policy & Conservation Act as amended by Security Act requires an average fill rate of SPR of at least 100,000 BPD. This requirement would cease to apply if SPR equals or exceeds the final storage level set forth in the Strategic Petroleum Reserve Plan. Notwithstanding any portion of law, no portion of the U.S. share of crude oil in NPR numbered 1 may be sold or otherwise disposed of other than to SPR. General Counsel is developing legislation. |
| Small Business Innovative Research | Reducing assessment rate from 1.25% to 1%. | General provisions have been include in proposed DOE appropriation language. |

Attachment B

FY 1985 Deferral Summary
(Dollars in Thousands)

| Appropriation | Amount Proposed For Deferral | Comments |
|---|---|---|
| Fossil Energy R&D | $48.397 | • Includes deferral of $41,991,000 in FY 1985 Budget Authority for activities where planned research has been performed and additional research is not necessary, has been shown to be infeasible, or as in the case of MHD does not offer adequate cost-benefit returns. Further commercialization efforts beyond the current level should be the responsibility of the private sector. These funds will be used to partially offset the 1986 appropriation request.<br>• Also includes $6,405,646 in prior year deobligations which will be used to offset FY 1986 DOE requirements. |
| Fossil Energy Construction | $ 5,137 | • Includes deferral of $2,828,000 which were deobligated from the SRC-II demonstration plant when the Federal Republic of Germany paid its final share and termination costs which displaced the U.S. funding. These funds will be used to offset the 1986 appropriation request.<br>• The remaining $2,309,383 is prior year deobligations. |
| Naval Petroleum and Oil Shale Reserves | $155,667 | • Includes deferral of $155,644,212 in prior year funds for the following:<br>- development drilling at NPR-1 ($68.6M).<br>- reduction of contractor personnel; less subcontracting and O&M associated with fewer wells drilled; improved gas plant performance at NPR-1; slower EOR results at NPR-3; and reduced material prices ($66.6M).<br>- facility construction savings and the need for fewer facilities at NPR-1 due reduced drilling ($16.4M).<br>- completion of exploratory well drilling at NPR-1 and 2 ($4.1M). |

FY 1985 Deferral Summary
(Dollars in Thousands)

| Appropriation | Amount Proposed For Deferral | Comments |
|---|---|---|
| Naval Petroleum and Oil Shale Reserves (Continued) | | ° Also includes deferral of $22,788 in prior year deogligations.<br>° These funds will be used to offset the 1986 appropriation request. |
| Strategic Petroleum Reserve (on-budget) | $270,738 | ° Includes deferral of $270,337,460 of prior year appropriations for crude oil storage facilities construction as a result of the proposed indefinite moratorium on further development of the SPR after FY 1985. These funds will be used to partially offset the 1986 appropriation request.<br>° $400,540 is deferred from prior year deobligations and will be used as an offset to FY 1986 DOE requirements. |
| SPR Petroleum Account (off-budget) | $827,028 | ° This deferral consists of prior year funds for FY 1986 advance orders and FY 1985 budget authority from savings due to lower oil prices in conjunction with the Administrations proposed indefinite moratorium on development and fill of the reserve after FY 1985 at which time the reserve will reach 489 MMB. |
| Alternative Fuels Production | $ 1,149 | ° Includes deferral of $296,715 from unobligated balances which cannot be effectively used this year and $852,285 from prior year deobligations of terminated activities. These funds are proposed for tranfer to Fossil Energy R&D to finance FY 1986 requirements. |

FY 1985 Deferral Summary
(Dollars in Thousands)

| Appropriation | Amount Proposed For Deferral | Comments |
|---|---|---|
| Southeastern Power Administration, Operation and Maintenance | $ 15,961 | • Consists of $12,467,000 in prior year funds and $3,494,000 in FY 1985 B/A that will not be needed as a result of power sales contracts with non-Federal utilities progressing at a slower pace than originally anticipated. These funds can be deferred to FY 1986. |
| Southwestern Power Administration, Operation and Maintenance | $ 8,774 | • Entire deferral is unobligated balances from FY 1984 and results from needing less funding than estimated for purchasing power and paying non-Federal utilities to deliver it. There is no current plan to use these funds in FY 1985 and unless a critical need arises will be deferred until FY 1986. |
| Western Area Power Administration, Construction, Rehabilitation, Operation and Maintenance | $ 30,390 | • Entire deferral is the result of unobligated balances at the end of FY 1984, $24M of which became available from the deobligation of prior year funds in 1984, including over $21M deobligated following settlement of litigation about purchase power and wheeling. |
| Departmental Administration | $ 8,501 | • Consists of unobligated prior year balances that are not currently programmed for use in 1985. These funds are proposed to offset the FY 1986 request for this account. |

The CHAIRMAN. Thank you very much, Mr. Secretary. I appreciate the comments.

I think the committee will operate under the 10-minute rule on the first round of questioning

I would yield to the Senator from Virginia, Senator Warner.

Senator WARNER. Thank you, Mr. Chairman.

Wouldn't you care to lead off?

The CHAIRMAN. Go right ahead. I'll be here all morning.

Senator WARNER. Thank you very much, Mr. Secretary. That was a good statement. It doesn't bring much good news in terms of the R&D that some of us had hoped, but certainly the reduction toward the deficit is important.

I would like to lead off first of all with your organization of the department. First of all because of the vital importance of both conservation and renewable energy resources, will you look at the possibility of re-establishing the position of Assistant Secretary for Conservation and Renewables?

Secretary HERRINGTON. Senator, I have only been at the Department a little over two weeks. I have had a chance to look at the organizational structure and evaluate a number of the programs. It would be my intention, because of the importance of this area, to re-establish the Assistant Secretary for Conservation and Renewables. I have made that decision although we have not moved forward in the Department with the necessary papers at this time.

Senator WARNER. Turning to coal, last year Congress passed the Clean Coal Technology Program as part of the fiscal year 1985 continuing resolution.

What is the status of the evaluation of the various proposals that have come in?

Secretary HERRINGTON. A number of proposals have been submitted. I think the evaluation of each proposal is an ongoing matter. I don't believe they have been concluded at this time. I have given instructions to the people in fossil energy that each and every proposal that comes in is to be analyzed fully and given our utmost priority. They will be summarized, and data responsive to the congressional request will be provided in our report to congress. This is a high priority item for us at this time.

Senator WARNER. I judge from your statement that you personally are going to look at this program and see that the goals of Congress are carried out?

Secretary HERRINGTON. I would assure the Senator that I personally will be involved in this, not only in the proposals, but in the direction this program has taken. I might add that I have spent a lot of time in the last two weeks learning about clean coal technology, about the programs that are ongoing, and about where the status of this industry is today in our country, and I think the results in the record have been very good up to this date.

The consumption of coal by elective utilities since 1970 in this country is up more than 85 percent. In that same period of time the emissions are down 25 percent. That says something for what has been done in this area.

I think we have more to do, but it has been a remarkable success story. There are other countries of the world that have done very little in this problem, and I think we have addressed it very well.

Senator WARNER. Thank you, Mr. Secretary.

For the first time in history, at least as far as this Senator knows, of any substantial import of coal into the United States. Meanwhile, our American coal miners are still suffering from double digit unemployment rates. Economic recovery has still not reached into the hollows of Appalachia. This year I anticipate the Subcommittee on Energy and Mineral Resources will conduct hearings on the competitive position of the U.S. coal industry, particularly focusing on energy imports. We have got to look at ways to improve the competitiveness of American coal. One way is clearly the cleaner and more efficient burning of coal.

How can the administration suggest a 32-percent cut in fossil fuel research and development funds in view of this diminishing export picture and production picture here at home and the import picture?

Secretary HERRINGTON. I think the administration proposal for cuts is basically in two areas, and that is the fuel cells that I mentioned in my statement, and the MHD, which is, from what I understand—and I again want to state to the Senator that I am not an expert in MHD technology; I have spent a great deal of time attempting to become an expert in it over the last few weeks—but the MHD technology would be a $30 million reduction, which is by far the largest in that area. It looks like a high risk, long-term project, and when faced with budgetary decisions that we have been faced with it is a large item that is obviously on the block, and I think that has driven our decision.

As far as work that is being done in other areas, I think that they are held approximately level, and there will be continued work, especially with the committee's interest in the $750 million fund that was authorized as a part of the synfuels legislation.

Senator WARNER. But doesn't your department assume a $60 million deferral in this year? That is in the fossil fuel R&D?

Secretary HERRINGTON. Yes. We are asking for deferrals to fund 1986 programs. There are a number of deferrals.

Senator WARNER. My last question, turning to the continuous beam accelerator program, commonly known as CEBAF, where does this stand on the list of your priorities?

Secretary HERRINGTON. From the information that I have received on CEBAF, I think it is a very valuable program, one that is, at least for the scientific people that have briefed me, one that is vitally needed, and we hope to propose construction for CEBAF in 1987.

Senator WARNER. That is encouraging news, Mr. Secretary.

I thank you, and thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Evans?

Senator EVANS. Thank you, Mr. Chairman, and welcome, Mr. Secretary. We didn't give you very much time to do other than hang your hat before we have you in front of us on budget affairs, but first you put in as part of the budget reduction the administration's overall proposal to reduce salaries of Federal employees by 5 percent.

What does that work out to be in the Department of Energy, how much of a reduction?

Secretary HERRINGTON. $26 million.

Senator EVANS. In terms of the strategic petroleum reserve, you talk about an indefinite moratorium, and of course we are speaking now specifically only of the 1986 budget. You suggested deferral of $827 million. How do we have that much money in the first place that is authorized but unspent, and would your proposal be to just keep it in an authorized state, or that it should be rescinded, and that you should come back for further appropriations at some future time?

Secretary HERRINGTON. I am verifying that that is the advanced order money that has been appropriated but would not be used for the 6-month lead time. I think on the SPR situation, one point I didn't put in the statement that I think does need clarification is that we are not proposing any more than a 1-year pause in the SPR fill. I think world conditions change, markets change, and it should be looked at every year. SPR has the capacity under its physical constraints today to go up to 610 million barrels if the fill rate is continued. One of the big items, for $150 million barrels, is to commence work on Big Hill. We have been very careful to keep all options open on further construction, for instance, pipeline rights-of-way, piping, pump plants. It can move forward should it become necessary.

We are trying to keep the options open, Senator, is what I am saying.

Senator EVANS. Which would mean presumably that you would prefer to keep these funds unspent but authorized?

Secretary HERRINGTON. Yes, sir.

Senator EVANS. Let me say that I think the idea of deferring to some extent the fill rate of SPR is—I think it may be a pretty good idea, and so I come at it as probably a supporter, or at least favorably inclined.

Has the Department, however, looked forward—and you mentioned that world conditions change. Indeed they do. Have you developed a proposal, or are you in the process of developing a proposal for how to measure or how to decide when it is time to reinstitute the filling of SPR, or to how many days minimum should be our goal? Sometimes the amount of oil necessary for a certain number of days depends on changing use patterns, of course, even when you have the same amount of oil in the strategic reserve.

What kind of policies has the Department established or have you yet on how we measure when to start refilling or if we should start refilling?

Secretary HERRINGTON. I have asked for an ongoing look at this. I don't think it is something you could look at and then put on the shelf. Just since 1977, when the 750 million barrel level was set, we have dramatically dropped consumption in this country. I don't know that anybody in 1977 could have predicted that. But they set the goals of 105 or 108 days and thought 750 million barrels ought to do it. We find under today's consumption we can make it with 489 million barrels the same 108 days.

Whatever methods are used to make that evaluation I think change as well as the conditions that lead to the conclusions. I think it is just something we have to have a continued, ongoing dialog on, and watch it at the Department through the experts that we have there, through Defense people, through our relations with this Committee, and to keep a finger on it.

Senator EVANS. I would agree that setting a specific level as we did originally of 750 million barrels couldn't foresee the changes which have occurred, and I guess I am reaching for a policy or a series of policies that wouldn't speak to actual levels of fill but would give us some guidelines and give the Department and the country some guidelines on which to base continuing decisionmaking or change in decisionmaking. Perhaps even at the congressional level we should consider modifying the particular goals and substituting for that some series of policies or positions that would guide us over the future.

Secretary HERRINGTON. I think one thing, Senator, is that we might develop a set of goals and criteria at the Department. I think that might be useful as a talking point. But right in the middle of looking at your goals and guidelines, you have the falling price of the oil. And so you have to figure out your costs. It is a real moving target, and I don't see any other way to handle it.

Senator EVANS. Let me turn to a subject you would be disappointed if I didn't bring up, and that is the Power Marketing Administrations and the proposal for change in the rules of the game.

I am very familiar, and I am sure you are also familiar with the proposals. It is my understanding that the Bonneville Power Administration at least, and the other Power Marketing Administrations, in conjunction with Bonneville, prepared and presented to the Department their analysis of the consequences of this proposal, and it's my understanding their analysis of the consequences, at least in the Pacific Northwest, added up to essentially no additional revenue, which was the purpose in the first place, at least in budgetary terms, and very severe economic dislocation. That end result was ratified by a separate and independent review made by the Pacific Northwest Regional Power Planning Commission.

With those in hand, is it your view still or the administration's view still that this is an appropriate thing to carry out?

Secretary HERRINGTON. I stated in my confirmation hearings one of the things that concerned me as a candidate for Secretary of Energy was an atmosphere of stability for business, families in the Pacific Northwest, a stable environment. Business decisions have been made. I think that is an important point. I don't want to leave the impression that that is all there is to the story. I understand the administration proposal, and I would like to work with it. We still have a situation where there is a substantial part of the country that is by subsidy lowering utility bills—in the Pacific Northwest.

What I think we have to do is reach a medium in this, or a repayment schedule that is agreeable, that is fair and reasonable, and that needs to bring a little more equity back into the system. But you must take into consideration in looking at that the people that have made decisions based on utility bills, and I have in mind specifically your very viable aluminum industry up there in the Pacific Northwest, who I have heard from, and I have learned a great deal about their problems.

Senator EVANS. Well, I would agree with you. We have two levels of discussion here. One is the particular and immediate proposal that relates to the 1986 budget, and the other is the longer and perhaps more fundamental, maybe even philosophical question of power rates. And I guess I could argue, or at least would differ with you in terms of whether or not there is in fact a subsidy, and certainly a subsidy when compared with many, many other kinds of Federal projects throughout the country for which there is very clear subsidy, no requirement for any payback of maintenance operation, principal, interest or anything.

But to get back specifically to the particular proposal for the 1986 budget, in your view, would that proposal as the administration has sent it forward, accomplish the purposes that the administration is suggesting, and that is an additional $600 million or so of revenue which was at least its immediate purpose, or are you persuaded by the economic impact studies which have been done that it wouldn't raise that revenue?

Secretary **Herrington**. I have seen a number of figures on this. If you keep a level demand of energy, you can raise that amount of money. The problem is when the rates go up, your demand is going to fall off, and I don't know the answer to that. I have seen a number of studies on it. I have listened to arguments on both sides. And as the Secretary of Energy, I support the administration proposal at this point.

Senator **Evans**. Well, I am sure. That is part of being part of the team. I understand that.

Do you have, or could I--and I know my time is up for this round, but do you have or could you share with me any studies you are aware of, analytical studies which have been made that would show that, in fact, that revenue could be reached by raising power rates to the extent necessary?

Secretary **Herrington**. I would be very happy to, Senator, and perhaps we could submit that for the record, if we could, please.

[The information follows:]

Attached is an analysis prepared by the Office of Management and Budget (OMB) which shows that revenue increases can be realized by raising power rates to some but not all customer classes. This analysis was prepared for the OMB director's testimony before Congress on Repayment Reform.

## IMPACT OF THE ADMINISTRATION'S PLAN

- The Administration's Plan will put the PMA's on a full cost recovery basis consistent with sound business principles. It will reduce the deficit. It will eliminate the current unfair subsidy of PMA ratepayers at the expense of the Federal taxpayer.
- The achievement of these goals will require increased rates to the PMA ratepayers. It is alleged that the rate increases will be *devastating* and must be *avoided*. I believe that some rate increase is *necessary* and can be absorbed.

## A. PMA RATE INCREASES WILL OCCUR IN THE CONTEXT OF EXTRAORDINARILY LOW POWER RATES

- The table below shows typical monthly electric bills for "all electric homes." It compares the bills for a cross-section of communities in the Pacific Northwest with bills for other communities throughout the country. All the communities shown for the Pacific Northwest are customers of Bonneville Power to varying degrees ranging from 3% (Grant County) to 100% (Clark County).

RETAIL RATE COMPARISON -- BONNEVILLE CUSTOMERS VS. OTHER TYPICAL CUSTOMERS
ALL ELECTRIC HOMES
(2,500 KWH/Month = 30,000 KWH/Year)
National Average Monthly Bill = $166

| Bonneville Customers | % BPA Supplied | Household Bill $/Mo. | Household Bill % of Nat.Avg. | Other Customers | Household Bill $/Mo. | Household Bill % of Nat. Avg. |
|---|---|---|---|---|---|---|
| Snohomish County, WA | 82% | $117 | 70% | Milwaukee, WI | 165 | 99 |
| Clark County, WA | 100% | 99 | 60 | Bakersfield, CA | 166 | 100 |
| Idaho Falls, ID | 100% | 85 | 51 | Jacksonville, FL | 175 | 105 |
| Eugene, OR | 65% | 70 | 42 | Gary, IN | 193 | 116 |
| Tacoma, WA | 45% | 61 | 37 | El Paso, TX | 199 | 120 |
| Cowlitz County, WA | 79% | 48 | 29 | Boston, MA | 224 | 135 |
| Grant County, WA | 3% | 35 | 21 | New York City | 333 | 200 |

- This data was controversial at this Subcommittee's hearing last week so let me be clear on where it comes from and what it covers:
  - The data comes from EIA's annual publication "Typical Electric Bills", published in December 1984. It is derived directly from information filed by 1200 utilities serving 6000 communities.
  - It shows the cost of using 2,500 kwh's per month or 30,000 kwh's per year. This is the same amount of electricity which Senator Evans assumes in his economic analysis of this issue. It is EIA's proxy for the power needed by an all electric home. It represents the amount used for lighting, refrigeration and other appliances, cooking, water heating, and space heating.

- o Listed on the left side of the chart are some of BPA's largest municipal and public utility district (PUD) customers, as shown in BPA's 1983 annual report.
  - o Snohomish County PUD, serving the county north of Seattle, is BPA's largest PUD customer; it paid BPA $79 million for 4.2 billion kilowatt hours in 1983.
  - o Cowlitz County paid BPA $52 million for 3.2 billion kilowatt hours. Clark County paid BPA $42 million for 2.3 billion kilowatt hours.
  - o Grant County (in central Washington) paid BPA $1.5 million for 62 million kilowatt hours. The PUD serving that county provided 97% of its power from its own low cost hydro system. Nevertheless, it benefitted from the BPA system.
- o The key points to note are that:
  - o The monthly household electric bills of Bonneville customers are about half (or less) the national average. In part this is due to the inherently lower cost of hydropower as compared with other sources. In part it is due to Federally-subsidized hydropower investments.
  - o Under the current debt repayment system, consumers on the right side of the chart are paying higher Federal taxes to help keep down the electric rates of consumers on the left side of the chart.
  - o Although the rates on the left side will increase as a result of repayment reform, they will still remain below those on the right side, as I will show later. For example, retail rates in Snohomish County would have to rise 42 percent before they reached the national average. Rates in Clark County, Washington would have to increase by two-thirds.

## B. BONNEVILLE'S WHOLESALE POWER REVENUES WOULD INCREASE BY 20%

- In the Pacific Northwest, the region of the country most dependent on PMA power, the Bonneville Power Administration would have to raise wholesale revenues by 20% in 1986 as a result of repayment reform.

- We have considered the revenue impact under two different assumptions regarding the continuation of the "residential exchange program". This program is intended to "equalize" the disparity in power rates between Bonneville customers and IOU customers through a Bonneville subsidy. The subsidy is established through a paper transaction where an IOU sells Bonneville a fixed amount of power at the IOU's average system cost, and Bonneville in turn sells back the same amount of power to the IOU at Bonneville's (lower) priority firm wholesale rate. The difference is made up through higher Bonneville rates, allocated primarily to the Direct Service Industries (aluminum companies).

  - Nearly one-third of Bonneville's total revenues come from investor-owned utilities as part of the financial transactions in this program.

  - If the exchange program is continued, Bonneville's current $3 billion revenue base would be increased by 20.2% as a result of repayment reform.

  - On the other hand, if the exchange program were terminated, Bonneville's revenue base would drop to $2.1 billion. At the same time, the remaining Bonneville customers would be able to save $186 million from elimination of the exchange subsidies, and this savings could be used to offset partially the repayment reform revenue requirement. There would be a smaller revenue base and a smaller revenue requirement, with a resulting revenue increase of 20.0%.

Bonneville 1986 Projected Revenues
($ in Millions)

| | Current Services | Repayment Increase | % Increase |
|---|---|---|---|
| With Residential Exchange | 2,964 | 599 | 20.2% |
| Without Residential Exchange | 2,066 | 413* | 20.0% |

* Assumes repayment reform increase ($599 million) will be partially offset by savings of $186 million from elimination of residential exchange subsidies.

## C. WHOLESALE RATE INCREASES WILL DEPEND UPON HOW THE INCREASED REVENUE REQUIREMENT IS ALLOCATED AMONG CUSTOMER CLASSES

- The decision about how to allocate the Bonneville revenue requirement among various customers is a regional decision which will be made after much public discussion.
- The allocation of the increased revenue requirement would be made on Bonneville's 1986 current services customer base, summarized in the table below.

### BONNEVILLE 1986 CURRENT SERVICES CUSTOMER BASE a/

| Customer | 1986 Rate b/ (Mills/KWh) | % of BPA Power Sales | % of BPA Revenues |
|---|---|---|---|
| Priority Firm............. | 22.7 | 64.7% | 61.1% |
| Industrial Firm........... | 23.0 | 20.6% | 19.7% |
| Surplus Firm.............. | 29.1 | 7.3% | 8.8% |
| Non-firm.................. | 13.5 | 7.0% | 3.9% |
| Other c/.................. | -- | 0.4% | 5.9% |

a/ Includes residential exchange.

b/ Current services rates as included in Bonneville's amended rate proposal, November-December 1984.

c/ Most of the "other" revenues are from transmission and other charges which are independent from power sales.

- o Bonneville has several major issues to address in setting its rate schedule:
    - o It could allocate the increased revenue requirement proportionally among residential and industrial customers, or it could propose a lower rate for the aluminum industries in order to maintain their loads and revenue base.
    - o It could continue the residential exchange -- a $186 million annual subsidy to investor-owned utilities -- or could propose that the exchange be terminated and the subsidy be applied to debt repayment.
    - o It could reduce prospective rate increases by reducing costs in its power, energy conservation and fish mitigation programs.
- o I recognize that these issues raise the possibility of administrative and legislative changes. If people in the Pacific Northwest believe changes are desirable to maintain reasonable power rates and current customer loads, both Bonneville and the Congress could reexamine statutory requirements for non-critical programs and subsidies that currently add to Bonneville's costs and rates.
- o Furthermore, the people in the Pacific Northwest could provide State and local tax breaks and other incentives -- as States and localities do elsewhere in the country -- to supplement whatever benefit is provided through the power rate structure.
- o Depending upon the allocation decisions made by Bonneville, the resulting rate increases could vary among wholesale rate classes, as shown in the table on the following page.

## ALLOCATION OF INCREASED POWER REVENUES AMONG WHOLESALE RATE CLASSES: ILLUSTRATIVE OPTIONS

| | Continuation of Residential Exchange Subsidy To IOU's | | Termination of Residential Exchange Subsidy To IOU's | |
|---|---|---|---|---|
| 1986 CURRENT SERVICES RATES | MILLS/KWH | | MILLS/KWH | |
| Priority Firm | 22.7 | | 22.7 | |
| Industrial | 23.0 | | 23.0 | |
| Surplus Sales | 13.5-29.1 | | 13.5-29.1 | |
| | MILLS/KWH | % INCREASE | MILLS/KWH | % INCREASE |
| 1. REVENUE INCREASE ALLOCATED AMONG ALL CUSTOMERS. | | | | |
| Priority Firm (Residential) a/ | +5.0 | 22% | +5.0 | +22% |
| Industrial b/ | +4.6 | 20% | +4.6 | +20% |
| Surplus Sales b/ | +2.7 to +5.8 | 20% | +2.7 to +5.8 | 20% |
| 2. REVENUE INCREASE ALLOCATED TO NON-INDUSTRIAL CUSTOMER | | | | |
| Priority Firm (Residential) a/ | +6.1 | 27% | +6.8 | 30% |
| Industrial | -0- | 0% | -0- | 0% |
| Surplus Sales b/ | +3.4 to +7.3 | 25% | +3.8 to +8.1 | 28% |
| 3. REVENUE INCREASE ALLOCATED ONLY TO PRIORITY FIRM CUSTOMERS | | | | |
| Priority Firm (Residential) a/ | +11.1 | +49% | +10.1 | +44% |
| Industrial | -0- | 0% | -0- | 0% |
| Surplus Sales | -0- | 0% | -0- | 0% |

a/ Includes effects of demand elasticity.
b/ Does not reflect any lost sales due to secondary effects.

- The final choice of a rate structure rests with Bonneville. Its choice must be made after extensive public comment within the region. The Administration's position is that Bonneville should repay the Federal taxpayer on a full cost recovery basis, leaving to Bonneville the means of achieving those revenues.

## D. WHAT WILL THESE RATES MEAN TO THE AVERAGE RESIDENTIAL CUSTOMER

- The worst case outcome in the previous discussion is a 49 percent rate increase at the wholesale level -- assuming that (1) the entire revenue increase is allocated to priority firm customers, and (2) the residential exchange subsidy is continued.
- In order to put a 49% wholesale increase into perspective, let's consider the impact on the average monthly household electric bill in the Pacific Northwest. Senator Evans, in his analysis of the issue, uses the following assumptions for an average household.
  - The household is in the service area of a non-generating public utility district that purchases 100% of its power from BPA.
  - Average retail price before reform: 3.7 cents per KHW.
  - All electric home consumption of 30,000 KWH annually.
  - Annual payments of $1,113.00
- Using these assumptions, a 49% wholesale rate increase produces the following impacts:
  - A 26% retail price increase.
  - Total annual payment of $1,402 after repayment reform.
  - Increased bill per year: $289.
  - Increased bill per month: $24.
- The estimated impact is $24 per family per month at the retail level in this worst case example.

o Once again, using Senator Evans' assumptions, consider the effect of repayment reform on rates in the Pacific Northwest compared to national average electricity prices.

| | No Reform | Reform with 26% Rate Increase |
|---|---|---|
| Residential Retail Rates ($ 1984) | Cents per KWH | |
| Average Pacific Northwest utility......... | 3.7 | 4.6 |
| National average.......................... | 8.1 | 8.1 |
| | % of National Average | |
| Average Pacific Northwest utility......... | 46% | 57% |

o The electricity prices paid by the consumers in the Northwest rises from 46% to 57% of the national average. They are not as well off as they were before the change -- but they are much better off than other consumers throughout the country.

o To repeat, the assessment above is a "worst case" assessment.

  - It assumes that the entire impact of repayment reform is loaded on Bonneville's priority firm customers, resulting in a 49% wholesale rate increase. If some of the revenue increase were allocated to industrial customers and surplus sales, the residential increase would be less.

  - It assumes continuation of the residential exchange subsidy. If the residential exchange is terminated, the increase in the average monthly household bill would be reduced by 8% to $22/month.

  - It assumes that the average residential household is served entirely with Bonneville power, resulting in a $24/month increase. Many utilities in the Northwest buy only a fraction of their power from BPA and the impact on their retail customers would be cushioned accordingly. (For example, customers served by a utility which bought 10% of its power from BPA would face only a 2.5% rate increase.)

- No one would be happy about a $24 dollar increase in monthly electric bills for consumers in the Pacific Northwest. On the other hand, it is important to put our fiscal house in order. As I have emphasized elsewhere in this testimony, the Federal government has heavily subsidized the PMA's and their customers for a considerable period of time. Now is the time to reform PMA financing and make it more realistic. We owe it to taxpayers elsewhere in the country.

## E. BONNEVILLE'S ELECTRICITY RATES WOULD REMAIN BELOW THE NATIONAL AVERAGE

o With repayment reform, Bonneville Power wholesale rates to residential customers would remain substantially below the national average.

### BONNEVILLE POWER ADMINISTRATION
The Effect of Repayment Reform
Comparison with Rates in the Rest of the Country

| | | Wholesale Rates (Mills/KWH) | | |
|---|---|---|---|---|
| | Year | BPA Priority Firm Rate | National Average | BPA as % of National Average |
| Historic | | | | |
| | 1940 | 2.8 | 7.0 | 40% |
| | 1950 | 2.8 | 7.5 | 37% |
| | 1960 | 2.8 | 7.5 | 37% |
| | 1970 | 3.3 | 7.0 | 47% |
| | 1980 | 7.4 | 30.0 | 25% |
| Current Services | | | | |
| | 1984 | 23.1 | 38.8 | 60% |
| | 1985 | 22.1 | 40.8 | 54% |
| | 1986 | 22.7 | 42.9 | 56% |
| Repayment Reform | | | | |
| | 1986 | 33.8 | 42.9 | 79% |

## F. THE FALLACY OF THE PROJECTED "DEATH SPIRAL" INCREASE IN POWER RATES

- It has been alleged that any further rate increases for Bonneville Power could lead to a "Death Spiral", ultimately increasing rates by as much as 80%. The "Death Spiral" argument goes something like this:
  - Under current law, Bonneville would be required to raise rates for both residential and industrial customers.
  - Rate increases to residential customers would cause new conservation efforts, resulting in reduced consumption and sales (due to the elasticity of demand).
  - Rate increases to the aluminum industry would result in the loss of half or more of Bonneville's industrial sales.
  - The loss of aluminum electricity purchases would shrink the Bonneville revenue base, requiring further rate increases to residential, commercial and the remaining industrial customers.
  - Spiraling residential rate increases would spur even more conservation efforts, further shrinking the rate base.
  - Many Bonneville customers would seek to avoid higher rates by buying lower cost surplus power from Canada.
  - The additional loss of electricity markets to Canadian imports would require further rate increases to residential customers.
  - And so on, and so on . . .
- The "Death Spiral" argument is in fact premised on a foundation of unrealistic assumptions, upon which a scenario of unsound business decisions is built, all occuring with a framework of public policies that may be no longer viable. The specific fallacies are laid out in the following table.

## FALLACIES IMPLICIT IN "DEATH SPIRAL" ARGUMENT

| Key Assumptions in "Death Spiral" | Fallacy |
|---|---|
| 1. Aluminum Plant Shut Downs: Assumes that rates are increased without regard to potential adverse impacts on the Bonneville revenue base. | 1. Revenue increase could be allocated among customer classes in a variety of ways -- e.g., currently the aluminum companies subsidize residential customers of the IOU's. The region and Congress could decide to eliminate or reverse this cross-subsidy. |
| 2. Continued Cross-Subsidies to Investor-owned Utilities (IOU's): Assumes continued cross-subsidy (currently costing Bonneville about $200 million). However, the "Death Spiral" leads to the absurd situation where IOU's would be in the position of subsidizing BPA. | 2. Artifically cheap public power may may have been an argument for a cross-subsidy to IOU customers on equity grounds. The subsidy becomes completely unsupportable under a scenario when public power rates become comparable to IOU rates. |
| 3. No Savings from Cost-Cutting Measures: Assumes "Business-as-Usual". | 3. Projected revenue increases could be offset through cost savings:<br>- Reduced thermal generation: The "Death Spiral" assumes a load reduction equivalent to 3 nuclear plants, but shows no savings from plant shutdowns.<br>- Reduced need for conservation subsidies: With reduced consumption equivalent to 3 nuclear plants and high rates, why continue a $100 million per year conservation program?<br>- Other "belt-tightening": Bonneville could delay new construction starts and other non-essential expenditures, such as $13 million for office automation and new furniture. |

| Key Assumptions in "Death Spiral" | Fallacy |
|---|---|
| 4. A Massive Increase in Canadian Electricity Imports: The "Death Spiral" assumes 300 mw of additional imports to the Pacific Northwest, where there are currently very little. | 4. Bonneville customers are locked into long-term contracts. Moreover, Bonneville can limit imports through wheeling access. |
| 5. High Demand Elasticity: The "Death Spiral" assumes a demand elasticity of -.2 in the first year. | 5. Data compiled by the Energy Information Administration (EIA) shows first year demand elasticities of -.069 (less than half Bonneville's estimate). A -.2 elasticity is reasonable as a mid-term value (5 years or more), but not a first year value. |

Senator EVANS. Thank you very much.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Evans.

Senator Rockefeller.

Senator ROCKEFELLER. Thank you, Mr. Chairman.

Mr. Secretary, I don't even like to bring up the word "acid rain," but it is a fact that it is at debate in a variety of forums. One of the things that I have heard people say in the utility business is that they are reluctant to convert from imported oil to coal because of the general climate of uncertainty over disposition of acid rain legislation. And I have no real sense of where that is going at this point in this session of Congress, but I do know that two things result from that. One is that utilities, a number of which have spoken to me about the matter, simply decline to invest in conversion because they aren't sure what the technology required is going to be, scrubbers or trust funds or whatever, and so they just stay away from it, and therefore continue with the use of oil, and more importantly for Appalachia, do not begin to use coal.

Now, it would seem to me that in a setting of uncertainty—and in the utility business, as in most business in general, that is the worst of all possible worlds—uncertainty about the future, it would seem to me that this is precisely the area or the time where research and development for clean coal technologies are needed because it gives some hint of what it is public policy is going to say about the future. Public policy doesn't dominate the future, but public policy speaks to the future.

From fiscal year 1981 through 1986, generally speaking, in fossil energy R&D in the Department of Energy there has been a 73-percent decrease in coal R&D, all aspects. In just this last year, from fiscal year 1985 to fiscal year 1986, that is, if the President's budget were to be accepted as is, the decrease would be 42 percent.

The clean coal reserve, of which mention has been made here, which strikes me as a very important link or a statement of interest on the part of the public sector, has a zero in it. Now, of course, that is only 1 year old, but in its first year there is a zero year for fiscal year 1986. Then I look over an account of a hearing I have here, William Vaughan speaking to a House committee said that the day of Government-funded technology development demonstrations are over, which may be, but my question to you is what conclusion am I to draw from a coal R&D budget which has gone down almost three-quarters in the last 5 fiscal years, if this President's budget were to be accepted as is, and 42 percent in the last year alone. The clean coal reserve is at zero. And there are some good things, liquefaction of coal, surface goal gasification, combustion systems, et cetera, have some good funding on them, there is no question, and that addresses some of the problems.

But is it not a matter of public policy statement in some dimension when the figure after clean coal reserve is zero?

Secretary HERRINGTON. Well, I think the $750 million under the terms of the Synfuels settlement is a fund that has to be appropriated. I share your concerns with a number of the statements that you have made. In my confirmation I was asked about acid rain, Senator, and I said I didn't know what caused it, didn't know what it did. I didn't know how to fix it.

I have had a lot of briefings since then, and I still feel the same way. I think several of the causes of acid rain, at least purported causes of acid rain that were suspected could have received immense funding, and we could have found out that was not the problem.

I think we are approaching a solution. I think there is good work being done, not only by Energy and by EPA, but the Department of Agriculture. I think we are on the track of a solution, but I don't think it is a problem that you throw a tremendous amount of money at and get a solution to acid rain. There may be a lot of causes we don't know about.

The clean coal programs that I have seen in the Department the short time I have been there, I am extremely impressed with fluidized bed burning, taking out the $SO_x$ and the $NOSO_x$ in the combustion chamber, I think, has a tremendous amount of potential, and it makes a lot of sense. Perhaps this is one of the areas we ought to really get into.

You see here a proposal by us that we move the MHD Program to zero again this year. In looking at that it is a priority choice between the types of technologies that we can afford and promise results. You will see it in other areas in here, in the nuclear area.

We have to make choices under these budgetary conditions.

I want to tell you that I fully support efforts to get clean coal. I think it is a major energy source that we need to exploit in this country. I think some of the gasification projects for coal have some merit, but I think it may be a little bit of an overstatement to say that we have cut this down by 70, or three-quarters, because there was SRC-I and SRC-II that were construction projects that were stopped, and I think some of the R&D programs are still in very good shape, and I would like to keep them in good shape, but I will do my best to make these choices between these various programs.

Senator **Rockefeller**. Mr. Secretary, I would look forward very much in working together with you and your people on these matters because I really do think that when public policy walks, or appears to walk away from R&D—and your point about SRC-I and SRC-II is a good one—that an incorrect message is sent on coal. In other words, if you go from extraordinarily high funding levels to lower funding levels the decrease over several years appears automatic. But it was on the other hand some time ago that those projects were abandoned, and it was just in the last year that the R&D budget went down about 42 percent. But still your point is a good one. And you agree that this clean coal reserve is important in terms of the development of the most abundant resource in the Nation.

I look forward to working with you on that program, and I thank you.

Thank you, Mr. Chairman.

The **Chairman**. Thank you.

Senator Johnston.

Senator **Johnston**. Thank you, Mr. Chairman, and welcome, Mr. Secretary, to the Energy Committee. You are off to a good start. I must say I am impressed that you are up to speed so quickly on so many of these difficult energy issues.

I want to also welcome our newest member, Senator Rockefeller, who among other things, will be at least my adviser on coal matters, along with Wendell Ford, who has been my adviser for all this time, and Jim, since Wendell is not here, I will say that is why we are in such deep trouble. [Laughter.]

Seriously, we are glad to have Senator Rockefeller, and I do want to reinforce his questions and his concerns on these new clean coal technologies.

Now, Mr. Secretary, anyone who believes that the energy problems are over need only look at the newest Energy Information Administration projections of where we are going in imports and where we are going in domestic production. You will find, for example, that in 1973, imports were 6 million barrels a day. By 1985, we are actually down to 5 million barrels a day, but by 1995 we project 11.74 million barrels a day, in other words, a more than doubling of imports between now and 1995.

One of the principal reasons for that is that domestic production falls off fairly rapidly according to the Energy Information Agency, from 11.09 million barrels in 1985 to 7.61 in 1995, which really would belie any confidence that people have about there being no problem in energy.

Now, with that in mind, I want to ask whether the administration is still seeking a strategic petroleum reserve goal of 90 days of net U.S. oil imports. I know it used to be the goal of the administration.

Is that still a national security goal?

Secretary HERRINGTON. I would say yes. I stated earlier before you came in the room, under current levels of storage, we have 108. I think that 90 days is an accurate figure.

I would like to comment a little bit on a couple of figures you gave here. Obviously our consumption is down. I am not so sure that I agree at this point that domestic production will be down by 1995. I have been impressed in the last couple of weeks with a couple of things. Everybody has said during briefings that U.S. consumption will be on the way up for a number of reasons, increase in GNP and several others. I have also heard the statement put out, the same as you did just hear, that our imports will be up, but if you talk to a number of producers who have come in to make courtesy calls, they say there are still great finds to be made.

I don't know the answer to that, but they use primarily Alaska as an answer to that, and they cite some figures and examples.

Senator JOHNSTON. Well, I have heard those anecdotal sot of stories, too, and you know the Baltimore Canyon, that was to be a great source, and the Gulf of Alaska was going to be fabulous, and various other places that may have some but not as much as they thought.

I hope EIA is wrong, but I think for planning purposes it is good information to use.

Secretary HERRINGTON. I would like to get a better handle on the problem, and it is going to take me some while to ask the right questions, to get the right research done, to give us a better handle on that problem. But I think it is something we have to identify.

As Senator Evans brought up, what is the proper level, when should we start using it, how do we evaluate our SPR situation? I think there are a lot more questions still outstanding than there are answers. And I think it is an ongoing project.

Senator JOHNSTON. Now, let me also mention that a 90-day supply, according to these figures, in 1987 where you would have an import level of 6 million barrels a day, would require 527 million barrels in the strategic petroleum reserve, which would give you, by my figures, 100,000 barrels a day fill rate in 1986. It would require that.

Now, I know what the administration wants to do. We have got budget problems, and we need to find ways to reduce that deficit. The local government people were in my office this morning, and they said be sure you don't cut revenue sharing, and last week it was the farmers, and no one wants to be cut, but I would just point out to you that the figures from the Department of Energy would indicate that if we are going to meet that 90-day level—and I think that it is very prudent to do so—then we are going to have to abandon that cut of zeroing out the strategic petroleum reserve.

Now, one more question, Mr. Secretary.

I had previously questioned you about the fact that the administration was going to modify contracts with nuclear utility companies to take their spent fuel, to require that DOE be required to take their spent fuel by 1998. The idea being that the utilities operating reactors are paying into a fund for that and that they need to be assured that their spent fuel will be taken by the Federal Government. The fact is, you probably will not have a geologic repository by that time.

Mr. Rusche, who is proceeding I think with great diligence and skill, seems to be trying to get in place an MRS so that they will be able to take that fuel by the appropriate date.

Is that still your plan, to modify the contracts?

Secretary HERRINGTON. Yes; that is our policy today, and I don't expect any change in that. I would agree with you that Mr. Rusche is one of the most conscientious administrators I have come across, and he is working very hard in really a no-win area, a hard, difficult area, and doing a marvelous job.

We talked about this at last Wednesday's staff meeting, and it is still our policy, and it is his intention to begin accepting in 1998, and we want to be ready with the MRS facility on a dual track with the repository sites.

Senator JOHNSTON. Well, will you modify the contracts to require that?

Secretary HERRINGTON. I don't know the answer to that because I don't know all of the technical details. If that is necessary, whatever it takes to start accepting that fuel in 1998, that is what we are going to do.

Senator JOHNSTON. Well, it is not that it is required by law that you modify the contracts, but the nuclear utility people want the assurance of the fact that they can rely upon the fact that the Government is going to take spent fuel in 1998, and what it does is it gives a little internal pressure to meet your own deadlines if you have that contract assurance. Also, the companies then will not feel that they have to expand their own facility and duplicate the ability to store their own fuel if the Government will take it in 1998. I think it is important that it be done.

Secretary HERRINGTON. Yes, sir; I would like to talk to the lawyers a little bit before I give you an answer on that. It sounds like the way to go on it, to make the contract modification, because the determination to accept that on that date is strong, and if that will reinforce or set the utilities at ease, that would be something we would want to do.

Senator JOHNSTON. Thank you, Mr. Secretary.

The CHAIRMAN. Mr. Secretary, on the strategic petroleum reserves, as I understand, the administration's proposal is to stop any further leaching activities at any of the facilities consistent with the capacity to fill to a level of 489 million barrels, to defer the money for acquisition beyond that, and to terminate construction; am I correct?

Secretary HERRINGTON. Yes; I think that is basically it. I have asked for what that translates to as far as delay times in construction. As far as renewing leaching activities and to begin filling again, I think your options are very good there and can start almost immediately.

Construction problems—the only problem that I would see raised would be further construction on Big Hill. I think some of this action and our efforts to do no further construction at Big Hill might amount to as much as a 6-month delay if we made the decision to go forward with Big Hill. But in the interim you could make the fill between 489 and 610 million in existing facilities by continuing the leaching operation.

The CHAIRMAN. But in order to do that, we would have to continue leaching at Bryan Mound and West Hackberry through fiscal 1986?

Secretary HERRINGTON. Yes, sir.

The CHAIRMAN. As I recall the figures, that's about $43 million, and the leaching cost for additional capacity is about 70 cents per barrel at those sites, and at Big Hill it goes to about $2.15 per barrel for the leaching cost at Big Hill.

Does that perhaps guide us toward a median solution if Congress seeks a median solution?

Secretary HERRINGTON. We, of course, will carry out any solution we are given by Congress, because as the agent for that, we're going to do what the law says. Whether a median solution is dictated or not I think is a judgment that the Senate has to make and the House. To me it is a reasonable risk under current market conditions and world conditions to look at this for a year.

The CHAIRMAN. Mr. Secretary, you said earlier, you used the figure of net imports. What is your definition of net imports? Are you looking at imports of all petroleum and petroleum products from all sources outside the United States when you use that term, or is it something less than all sources?

Are you deleting from that SPR purchases? Are you deleting from that figure imports from Mexico or Venezuela?

Secretary HERRINGTON. Yes. We delete SPR purchases in projecting current days of imports but we do include private imports from Mexico and Venezuela in our calculations.

The CHAIRMAN. How secure is the supply from Mexico and Venezuela in the event of an emergency? That is speculative, I know.

Secretary HERRINGTON. That is really speculative. I would have to say Mexico is probably one of the most secure supplies, in my personal opinion, but I'm sure some would disagree on that.

The CHAIRMAN. That oil travels by tanker from the Yucatan Peninsula to Gulf Coast ports, does it not?

Secretary HERRINGTON. It does not go through the Florida Straits, at least most of it.

The CHAIRMAN. In World War II there were tankers sunk within eyesight of the eastern coast of the United States. The Soviet Union has far more submarine capacity than Nazi Germany ever had.

Secretary HERRINGTON. I would agree, Senator. They also have a base in Cuba for submarines. I don't disagree with what you're saying at all.

The CHAIRMAN. So rather than being more secure than they were in World War II, they may be more vulnerable since they do move by tanker through waters that are not totally secure. And I guess I'm a little concerned that when we look at national security we tend to believe that nothing could happen to those supplies, and of course, all of the Venezuelan oil comes by way of tanker, all of which is vulnerable unless we can maintain freedom of shipping on the high seas.

Secretary HERRINGTON. I have only one footnote to add to that. With the current capability of the ASW efforts of the U.S. Navy I would have a lot more confidence in the ability to escort those tankers from Yucatan to the continental United States.

The CHAIRMAN. It depends upon the nature of the threat, but I would assume that if we're in a total wartime situation in which the Soviet submarines are really attacking shipping coming to us, our ASW capacity is going to have an awful lot of demands on it.

Secretary HERRINGTON. Yes, sir; I think you're right.

The CHAIRMAN. Not just one sea route. And the reason I mention that is I'm a little concerned that we tend to, in order to drive a decision that we think is an appropriate decision, we may distort the factual basis for that decision. I may well, because of the budgetary constraints, agree with you with respect to a moratorium on SPR fill, but I want to do that with a very accurate view of what the security risk to this country may be. That will include, in my judgment, at least counting all imports, not just net imports.

There's another aspect of the petroleum imports that troubles me somewhat in recent past, and I think will become more apparent in the future, and that is the shift away from raw product to semifinished or finished product coming into this country, which deals not only with the amount of product that we have but also our capacity to handle the product that we do have in this country. We're not dealing with inadequate refinery capacity in this country now. We're dealing with very good, modern refineries that are operating at less than capacity or are being shutdown because of increased product coming into this country; is that not true?

Secretary HERRINGTON. Yes, sir.

The CHAIRMAN. And if that continues, are we not then going to see a different kind of a constraint on our capacity to meet our security requirements, even drawing down SPR, because the SPR would have to flow through existing pipelines to existing refinery capacities operating to handle that oil? If, over a short period of time, we see a deterioration of either pipeline capacity or refinery capacity, then even having SPR is not an adequate guarantee of our security; is that correct?

Secretary HERRINGTON. Senator, I think you've made some very good points on that, and these are ones that obviously concern me as the Secretary and you sitting on this committee, those are very difficult to evaluate.

The CHAIRMAN. We want to look at little further, too, at the question of how we shutdown and then startup again on fill, what happens to equipment, and what happens to the existing pipeline purchase. Are you prepared at this time to indicate whether you will go ahead with the purchase of pipe intended to be used in connection with this, or is that something that is under reconsideration?

Secretary HERRINGTON. We do intend to go ahead with the pipeline distribution enhancements and, as I mentioned before, purchase the necessary rights-of-way and keep as many options open as we can for this.

The CHAIRMAN. You also have a pipeline procurement for leaching facilities. What is your intent with respect to that pipeline?

Secretary HERRINGTON. I'm aware we're going to finish the current contracts. I don't know if that completes the job. That is something I would like to check on before I give a full answer and submit it, please.

[The information follows:]

### PIPELINE PROCUREMENT FOR BIG HILL

The Department has cancelled procurement solicitations for construction of the three pipelines (fresh water, brine disposal, and crude oil) which were originally planned as part of the development of the Strategic Petroleum Reserve site at Big Hill, Texas. However, we have taken steps to complete acquisition of the necessary rights-of-way to reduce the lead-time requirements for resumption of site development at a later date.

The CHAIRMAN. And it may well be that decision hasn't been made. I don't know. But there is a rather large procurement.

Secretary HERRINGTON. We had discussed completing existing contracts for sure.

The CHAIRMAN. Which would shed some light upon our ability to shut down and ability to turn up again if we decide to go ahead with the leaching at Big Hill.

Let me shift for a moment. I have some other questions that I will submit for the record.

As I understand, you've said twice in your verbal responses here this morning that you are not seeking any more than a 1-year moratorium, and at that the end of that time you would take another look and make another recommendation; is that correct?

Secretary HERRINGTON. I think that is the prudent way to proceed. There is language in a number of places that it is a 5-year moratorium. But I don't think you can make that kind of a decision.

The CHAIRMAN. I want to follow up for just a moment on Senator Evans' questions with respect to the Power Marketing Administrations. I have read at various places that those of us who come from the Pacific Northwest are seeking to maintain a subsidy. I personally don't like that choice of language, because it seems to me that if we're expecting the Federal Government to live up to its contracts, that is not necessarily seeking something new.

On the other hand, I certainly cannot quarrel with the Federal Government's desire to see that the Bonneville Power or any other Power Marketing Administration lives up to its contracts. But I don't think it is necessarily a balanced judgment to suggest that Bonneville should live up to its contracts while the Federal Government seeks to change its obligations under contracts.

I guess that is by way of saying that if an analysis indicates that Bonneville Power Administration is not meeting its current obligations that you and we share an obligation to make certain that it does meet its current obligations. We know that for a period of time not too many years past as a result of a variety of circumstances, Bonneville Power did not meet its repayment obligations to the United States Treasury. We are advised—well, let me back up.

One of the requirements of the Northwest Power Act was that Bonneville go through a rate case before FERC. That rate case that they have taken to FERC and has been approved by the Federal Energy Regulatory Commission included rates which are sufficient to catch up the arrears and put them on a repayment schedule that meets current obligations—at least so we are advised by both BPA and FERC.

Am I incorrect in that? Is there evidence that you have that Bonneville is not going to meet its obligations under the rates now established in that rate case?

Secretary HERRINGTON. I don't know the answer to that, Senator. I know the concerns about the past repayment schedules that have come up. I'm not totally up on whether that rate case is something that will drive future payment plans. The only point I would make that I think is being made to the Department of Energy by OMB is that we get some good repayment schedules that are set forth, but, for various reasons special circumstances come up, and they slip.

There was a repayment study in 1974. Ten years ago BPA was going to pay $390 million in principal to the Federal Government over the 1981 to 1984 time period. In 1977 they restudied that again and agreed to pay $542 million over the same period. And then, of course, as late as 1980 Bonneville promised to repay $1,022,000,000 over that time period.

I think the concern is that because of the slippage there were no principal payments except $2 million; so it is like a debtor getting behind. I think we are looking for the same thing, but it is a question of how you accomplish it.

The CHAIRMAN. Mr. Secretary, I know there's a time lag on information. Those studies that you referred to in the mid-1970's and the late-1970's and as early as late 1981 before this administration came to town. This administration and the administrator that they have put in place there have caught up on all back interest. As of last fall there was every penny of deferred interest has been paid, it is my information. And as a matter of fact, the rate case which they have just completed will have not only all future interest paid, but all principal payments on a schedule that would pay out according to current obligations.

Now, my understanding, too, and I think it is fair to say people may wish to look at two aspects of that repayment schedule. One is whether it was right over the last 20 years for Bonneville to reschedule its debt payment, as they had added increments of debt. I think that is a legitimate question to ask.

The second question is indeed, if they are entitled under the law and under their contracts with the U.S. Government to elect to pay back those obligations which have the highest rate of interest first and to defer till last the payment of those obligations that bear the lowest rate of interest, Mr. Secretary, you've been a businessman. It is refreshing sometimes to have a man down there that has had to meet payrolls and pay bills. But I suspect if you in your operation of any real estate in California were to have two obligations, one with a high rate of interest and one with a low rate of interest, and you had the opportunity to elect to pay one or the other, you would elect to pay off the one that had the high rate of interest, wouldn't you?

Secretary HERRINGTON. Absolutely. And I hope that the example I gave here, I think I'm attempting a little bit to give the genesis of the problem. I don't want to in any way infer that Peter Johnston isn't doing a good job out there. He's one of the best managers that we have had. I think the BPA is in great shape. But I wanted to highlight the problem a little bit so that we can understand the background of why the administration is pushing.

I think we all understand the problem and that we can make progress in that direction.

The CHAIRMAN. I agree with that, and I think there is a reasonable occasion for us to look at whether or not the repayment schedule that Bonneville has proposed, whether it adequately meets the test of responsibility to the Federal Government.

I will share with you and with any other members of this committee or the Senate a desire to look at that question to determine whether or not the information we have been given is correct. It appeals to me that if they are making repayment according to the schedule that will meet all other contractual obligations with the U.S. Government, that then if we wish to change practices as to the way in which those are scheduled, that should be prospective and not retrospective with respect to the changes in past contracts.

I would note, too, that the question of how much principal has been repaid depends upon whether you have a straight-line amortization of debt or whether you have an amortization schedule. They have been on the latter, a levelized payment over the years with a payment of interest and principal being completely repaid at the end of the period of time. That is like an annuity contract, if I could draw the analogy, is it not?

Secretary HERRINGTON. Yes.

The CHAIRMAN. Thank you. Thank you, Mr. Secretary. I look forward to working with you on that subject, and I'm sure that others from the Northwest, as well as other interested Senators, will be looking at that.

Secretary HERRINGTON. It is not an easy one, but I think together perhaps we will be able to find a solution.

The CHAIRMAN. I thank you, Mr. Secretary.

Senator Melcher.

Senator MELCHER. Thank you, Mr. Chairman.

Mr. Secretary, I want to refer you to MHD. In light of the proposal to undertake the retrofit of the MHD unit of the Montana Power Company's existing Frankburg utility plant, which was submitted by 11 corporations, including TRW, Westinghouse, AVCO, Babcock & Wilcox, General Dynamics, and the Montana Power Co., why do you consider it wise policy to cancel the MHD program at this time?

Secretary HERRINGTON. Well, sir, I made some statements about MHD in my opening remarks here, and I hope I'm not in the position of refusing to fund Christopher Columbus in his discovery of America.

I have learned a lot about MHD, at least an entry level knowledge of this project, in the last 2 weeks. I've talked to a number of people. It has a very good community, they are very knowledgeable. There has been a lot of work done on it.

I think whether it's wise policy or not, the decision in this budget on MHD is driven by choices that have to be made; and I hope very much we have made the right choice in this submission.

We have over $400 million in MHD at this date, and a substantial amount of money has to go into it to further complete it. I think some tremendous work has been done in the technology of the magnets, and the design of the channels are, I guess, some of the best in the world. It has a future, but within the Department of Energy we hope that there have been fair, impartial evaluations of this project. It does not rank high when it is put side by side with other clean coal technology projects. It does not rank in the level of our budget constraints to the extent we think that another $30 million in 1986 is the proper recommendation to the Congress.

I might say the Energy Research Advisory Board of the Department of Energy, which is staffed by a number of professionals and I think very impartial, has ranked the project far down on the list. And it is just a hard choice to make, but that is, I guess, the basic policy decision that I have to try and support.

Senator MELCHER. Don't the Holifield tables suggest that the Department of Energy should request funding for MHD in fiscal year 1986?

Secretary HERRINGTON. I'm not sure of that, sir.

Senator MELCHER. Well, at any rate, you do have this definite proposal by the companies that I mentioned, and so at least they seem to think it would be good policy. But going on from there, since this is the only direct coal conversion electric power generating system under development by the Department of Energy which has the ability to reduce emissions of both sulphur oxides and nitrogen oxides dramatically below EPA standards, isn't that part of what we're trying to accomplish?

Secretary HERRINGTON. Yes, sir, and I would like to add one thing. Just because we're not proposing MHD in fiscal year 1986 doesn't mean that we ought to stop looking at it. I still may want to look at this technology project some more.

Senator MELCHER. Well, are you recommending canceling the program or just holding it in limbo?

Secretary HERRINGTON. I think it has to go into limbo for fiscal year 1986. I just do not want to be in the position of saying it should be canceled altogether.

Senator MELCHER. What would you do with the component development integration facilities owned by the Department of Energy? It has a payroll, and it has an operating staff. What would you do with that?

Secretary HERRINGTON. I believe the facility could be available for other types of experiments, or mothballed. I don't think it should be dismantled. But I do not see proceeding full speed with the current MHD Program. That is what I am saying in the budget.

Senator MELCHER. Well, you know, proceeding full speed, it hasn't been proceeding full speed. But what are you saying? You would mothball it in that you would own the property but leave the crew go, fire the staff?

Secretary HERRINGTON. That always is one of the most difficult parts. One of the ways we might be able to get out of this problem is to make the facilities available to the private sector for further work on MHD.

Senator MELCHER. Have you got a deferral request?

Secretary HERRINGTON. Yes.

Senator MELCHER. Well, you might have a hard time getting a budget, Mr. Secretary, under these strained circumstances where only about 3 weeks ago you seemed to have a different response, both privately and publicly.

Secretary HERRINGTON. Well, sir, I would like to clarify that. I did not, I don't think, publicly say that MHD was a program that I personally supported. I agreed to be open and look at that particular project, and I will continue to do that. But given the budgetary constraints we have, I guess it is my job as Secretary to make these choices between where that money goes. And if you take $30 million in one lump for MHD, it impacts on the other R&D projects.

Now, I understand that we may still be looking at a number of these projects, but I am trying to get the most for our research dollar in these budgetary choices.

Senator MELCHER. Well, it does seem to be skirting around the fact that about 3 or 4 weeks ago, whenever it was we had your hearing here, prior to that we discussed looking at it—in fact, I think the record will show that we talked about when you might be going to visit CDIF, and now you've got a deferral up, and I don't understand why, since even on page 85 of this document, Congressional Budget Request for Fiscal Year 1986 for the Department, it states,

> The Department proposes that phaseout of the MHD Program begin in fiscal year 1985. The MHD Program is believed to be costly, * * *. Because of these factors and in light of the current fiscal constraints, the Department proposes to terminate the program. The Government's test facilities will be made available for use by others.

Does that trigger the deferral? When did the deferral come up?

Secretary HERRINGTON. The date I am given is February 6 that the deferral came up.

Senator MELCHER. Well, it is a pretty dramatic shift, I would suggest, Mr. Secretary.

Secretary HERRINGTON. Well, Senator, I still plan to visit—I don't know if I'm welcome now—but I still plan to visit the CDIF, and I would like to see the facility.

Senator MELCHER. Well, you know, there's a question of, using your term "mothballs," if it is in mothballs, what are you going to visit?

Secretary HERRINGTON. Well, I would like to see the technology.

Senator MELCHER. Is this just another one of these things you send up here periodically or the Department sends up here periodically knowing full well it is so preposterous or so out of tune with current thinking of the industry and Congress, that you show little reduction in the budget and know full well that Congress is going to save it and put it back in?

Secretary HERRINGTON. No.

Senator MELCHER. The deferral message says:

> Additional research is not necessary. It has been shown to be infeasible. Finally, reductions are proposed in some technology areas such as MHD which do not offer adequate cost-benefit position to continue to develop.

Well, I dare say that the cost-benefit returns for gaining 50 percent in efficiency in burning coal and for a new generation of electricity in a process that reduces sulfur oxide and nitrogen oxide below EPA standards, rather dramatically below EPA standards, seems to me to refute any idea that it isn't cost effective.

Secretary HERRINGTON. I want to respond to that. I believe the information I've gained in the last 2 weeks on briefing with experts in the Department and outside is that we could spend as much as $500 million on MHD at the low end and as much as $2 billion on MHD at the high end. And I believe the decision is not as cold-hearted as you've painted it. It is just something I sincerely believe we can't afford at this particular time when faced with other choices such as the fluidized bed combustion systems and some of these other technologies that I think are farther along and closer to industry use.

Senator MELCHER. Mr. Secretary, I will refer you to my first question, the proposal to undertake a retrofit of an MHD unit onto Montana Power Co.'s existing Frankburg utility plant; in other words, moving on to a commercialized basis.

That proposal by those companies I listed which is still there with you down in that department, envisioned over the next 5 years of about a $250 million investment by Government and substantial matching funds, substantial matching funds from private industry. So might I suggest that perhaps in your 2 weeks of briefing that there are other people to be consulted?

Secretary HERRINGTON. Yes, sir. I am aware that they are asking the Government to pay for pac testing—$150 million—plus part of the retrofit—$206 million.

Senator MELCHER. And also, EPRI might be consulted, and people who are out in the grassroots generating electricity for the United States and are familiar with coal, and familiar with its potential, and familiar with the real live world and the marketplace and what they have to do, they might have a different opinion.

Secretary HERRINGTON. Yes, sir.

Senator MELCHER. Thank you, Mr. Secretary.

The CHAIRMAN. Thank you, Senator.

Senator Bumpers.

Senator BUMPERS. Mr. Secretary, concerning filling the strategic petroleum reserve, the Energy Information Agency says we need by 1990 667 million barrels in the SPR in order to have 90 days of net U.S. oil imports. I think that is probably based on 6 million barrels a day by that time, or maybe a little more than that. Yes, it's 7½ million barrels a day at that time.

Right now we know we don't have the ability to store more than 610 million barrels, and so that brings me to my question, and that is Big Hill. There's nothing in the budget for the construction of Big Hill, which is estimated to cost around $300 million.

My question is if we need 667 million, and we only have a 610 million barrel capacity now, we either have to say the energy assessment is wrong, or we're not going to do anything about it, or we have to say we're going to have to do something else, and Big Hill is something else. Do you agree with that?

Secretary HERRINGTON. I don't know if the decision is that clear, Senator. Obviously, our importation level is below the 7.5 million barrels a day that you have stated that the Energy Information Administration is projecting. And that is quite a ways out.

I think what you are seeing here, in my estimation, we have 108 days based on current statistics. We could do 108 days with the 489. We have the capacity to go to 610, as you say, with existing facilities. I think all that is being proposed is that a reasonable risk can be undertaken to wait 1 year and take a look at it again without jeopardizing national security. I think that is what is being proposed.

Senator BUMPERS. As I understand it, your budget assumes that we're only going to go to 489 million barrels and not 610 million.

Secretary HERRINGTON. That is correct; 489 is the budget assumption, if we stop at the end of fiscal year 1985.

Senator BUMPERS. We started in May 1978, Mr. Secretary, long before you came on the scene, and we had planned for a 1-billion-barrels strategic petroleum reserve.

We have recently relaxed. But I want to ask you, don't you think it is dangerous to be shooting for 489 million barrels? Don't you think that that is a calculated risk that we are taking with this Nation's security and its economy?

Secretary HERRINGTON. The only thing I can say is that that 750 million barrels, the original figure—I guess it was a compromise down from 1 billion, and you could reach 750 million barrels as a reasonable figure back when this was set up—but the calculation that drove that number was the 105 or 110 days of protection.

The only point we are making here this morning that I think is worthy of consideration is that we have the 108 days under current usage requirements with the 489. Whether we are jeopardizing national security or not, the difference between 489 million and a billion, I think, has to be a decision that is reached by many individuals, not just me.

But we don't know a lot about what the threat is. We have ideas, but we have a changing market, and we have changing consumption, and I think it would be reasonable to hold off on this fill rate for a year and to take another look at it.

Senator BUMPERS. Mr. Secretary, I think this committee and Congress are probably going to take exception to that part of the budget. I've used the illustration a lot of times that among other things I did before I got into politics, I owned a cemetery, and I sold out because even as great a salesman as I am, I find it very difficult to sell cemetery lots to healthy people. And I find it very difficult to talk about SPR to people, because gasoline prices have been falling. We think we have a world glut of oil and natural gas.

You and I both know that the sky is going to fall in on us one of these days on this whole proposition, and it could happen a lot sooner than we think, because we are still at the mercy of the oil cartel. We have benefited from their internal bickering and the disarray that the cartel finds itself in now, but we never know when they may get their act together. And it seems to me that what we are talking about—and incidentally, Congress never did agree to 750 million barrels. Congress has always insisted on 1 billion barrels.

What we wanted more than anything else was a certain number of days' supply. It doesn't make any difference. In other words, if you could convince us that you could pump 7 million barrels a day out of that or even less than that, and that would be adequate for the times, that's fine. But right now, in order to get with 1 billion barrels, 1 billion barrels would provide us 142 days of production, assuming you could pump 7 million barrels a day out of SPR, which right now is absolutely out of the question. You couldn't even begin to pump that much out of it. Do you agree with that?

Secretary HERRINGTON. Yes, sir.

Senator BUMPERS. And if you look at the EIA forecast on page 177, it shows that oil imports are headed for 11.7 million barrels a day. That's higher than the highest figure we ever used when we were planning on a 1 billion barrel reserve.

So all I want to say is—and I'm not going to belabor this actually. I am on Senator Bradley's turf. This is a thing that he has been single-mindedly concerned with in this committee, but he is not here. It is a matter of great concern to me, but I won't pursue it any further except to say that I'm sure there's going to be a significant effort, a very vigorous effort made in this committee to do something about that. I can't think of a better time to do it than when oil is selling for $26 a barrel. We were looking at $32 to $35 oil when we were talking about a billion barrels.

Secretary HERRINGTON. Yes, sir. I think one comment is that this is probably a subject where we all agree on the end goal. We may have some differences on how you get there. One of the things I could do in the Department is continue to monitor the situation so that you have adequate information to make the decisions you have to make. I don't think either one of us or any other person in this room wants to jeopardize national security. It is simply a problem of choices. We are going for the enhancements and doing the best we can to keep the options open. And, of course, if we are directed by Congress to do other matters, we can come back and ask for more money for distribution or for different rates of production out of SPR. But it is something that we need to continually look at. It is not a black and white issue.

Senator BUMPERS. Mr. Secretary, are you familiar with the administration's efforts to tax something that the exploration industry considers to be a real sacred cow, and that is intangible drilling cost?

Secretary HERRINGTON. Yes, sir.

Senator BUMPERS. How does that square with your statement here about encouraging domestic production? My friends in the oil industry—and I don't have a whole lot of them——

[Laughter.]

Senator BUMPERS. But anyway, my friends in the oil industry tell me that is a real disincentive. And I am on record for 10 years as being opposed to the taxation of intangible drilling costs.

How do you square that?

Secretary HERRINGTON. I don't think it needs to be squared yet, because I don't think the administration's tax plan is out there.

Senator BUMPERS. I agree. I don't think it's going to fly either on that point. After all, we're looking for a little consistency in policy here.

Secretary HERRINGTON. You have heard from a number of people, and I've heard from a number of people, and I'm positive the administration has heard from a number of people, estimates up to a loss of 500 rigs a year if that goes through. I just don't think that the tax plan is out there on the table, and I won't speculate on it. There is a cost. We both know there is a cost to it. And whether it's the right thing to do or not is something that we have to work with Congress on and come to the right answer.

Senator BUMPERS. Mr. Secretary, what happened to gas reserves in this country in 1983 and 1984? Did they go up or down?

Secretary HERRINGTON. I would not have the exact answer.

Senator BUMPERS. Let me say that I'm one of those trial lawyers who thinks "I don't know" is a great answer when you don't know.

Secretary HERRINGTON. I don't know. I could guess, but I don't know the extent that they went up or down.

Senator BUMPERS. Are you going to make any kind of concerted effort to deregulate old natural gas this year?

Secretary HERRINGTON. I think I would like to see what happened after the January 1985 date to see what happens in the next 6 months. I'm inclined to make a try at it if you want me to speculate a little bit, but I would like to see what the results were of the partial deregulation.

Senator BUMPERS. Are gas prices continuing to decline?

Secretary HERRINGTON. In which areas of the country?

Senator BUMPERS. Anywhere.

Secretary HERRINGTON. I don't know.

Senator BUMPERS. It's my understanding from people in the industry that, for example, it was no trick a year and a half ago to get $3.40 an MCF. Some of them are getting $2.70 and less now. I mean I'm talking about decontrolled gas.

Secretary HERRINGTON. Generally, there is a decline, but I'm not sure that is true everywhere. There are a couple of areas that I would have questions and would like to look at. But I think generally the statement is true.

Senator BUMPERS. Do you think natural gas is a suitable fuel for boiler fuel for big boiler use and generation of electricity?

Secretary HERRINGTON. Yes.

Senator BUMPERS. You do?

Secretary HERRINGTON. Yes. It depends upon the economics at the time the decision is made to build the factory and build the plant and the transmission cost. I think you must leave the option open to the industry to make the choices as to what type of fuel they want to use.

Senator BUMPERS. Do you agree with me that natural gas is by far the most efficient, clean energy we have available to us? I suppose in one sense nuclear energy is cleaner, but it presents an entirely different set of environmental problems.

Secretary HERRINGTON. I was thinking there—I would have to say that nuclear is the cleanest. And I was weighing in my mind the safest. I think it ranks with natural gas in safety. But I understand what your point is. I think it is a very clean energy source, and it needs to be encouraged.

Senator BUMPERS. Mr. Chairman, let me ask you a question, because I'm not sure of this. What is the section of the Natural Gas Act that prohibited the use of natural gas?

The CHAIRMAN. The Fuel Use Act.

Senator BUMPERS. But there was a threshold, and I forget what it was, that you could not use natural gas in boilers of a certain size. I think there's going to be a concerted effort this year to repeal that.

The CHAIRMAN. It is a very high threshold, and it would be very large industrial boilers, primarily utility boilers. Staff says 250 million Btu per hour.

Senator BUMPERS. Is it your belief that that should be repealed?

Secretary HERRINGTON. Yes.

Senator BUMPERS. And that there should be an unlimited use of natural gas?

Secretary HERRINGTON. Yes.

Senator BUMPERS. Have you looked at the debate in this committee or in the Congress on that proposal at the time it was adopted?

Secretary HERRINGTON. Only parts of it. I have heard both sides laid out to me, and I do not claim to be an expert in it, but I generally am familiar with the issues.

Senator BUMPERS. Well—and are we on a 10-minute time limit, Mr. Chairman?

The CHAIRMAN. Yes.

Senator BUMPERS. Let me just ask one other question, and then I think I will be finished.

I haven't had time to look at your proposals, Mr. Secretary, but what is there in here in the way of research on solar cells, photovoltaics?

Secretary HERRINGTON. Let me look at the exact number; $57 million is the figure I'm given—I'm sorry—$45 million, Senator. $45 million is the figure we are proposing for photovoltaics.

Senator BUMPERS. Is that under the summary I'm looking at here. There's a figure here for solar of $170.6 million, which is a decrease of $32.7 million. Are photovoltaics found within that item?

Secretary HERRINGTON. Yes, it is. Photovoltaics in fiscal year 1985 was $56.6 million. We are proposing $44.8 million, of which the difference is primarily accounted for by the Sacramento Municipal Utility District, the SMUD proposal. The demonstration project was not included in our request due to its limited potential contribution to advancement of PV technology.

I think generally photovoltaics has been the most encouraging area of the R&D. It is the one that we will do our most to encourage in the solar R&D budget.

Senator **Bumpers**. Mr. Secretary, what do we now have, from a commercial standpoint, what is the cost per watt for photovoltaic electricity?

Secretary **Herrington**. I'm sorry. I would like to submit that for the record. I think it varies. You had a proposal where Sacramento said to the contractors we're willing to spend $4 for flatplate modules , and they had contractors coming in at $5.

I don't know what the difference was in specifications of those panels or what the guidelines were, but I think you could find different prices.

[The information follows:]

The cost per peak watt for photovoltaic electricity varies depending on the size of the field, amount of sunlight, the type commercial application, and whether battery storage is necessary. Based upon the best available information, photovoltaic manufacturers are offering flatplate modules at slightly above four dollars per peak watt to slightly below eight dollars per peak watt and are offering concentrator modules for as low as the three dollars per peak watt range depending upon the type of technology involved and the volumes sought by prospective purchasers. The price for the full system, which includes land, foundations, structures, wiring and power conditioning, is approximately twice the module price or approximately eight dollars per peak watt. Six years ago the best system prices were thirty dollars per peak watt in 1979 dollars.

Senator **Bumpers**. That is encouraging to me, because if I'm not mistaken, when I came to the Senate we were talking about $15 a watt.

Secretary **Herrington**. There has been substantial work in this, and the experts that I have talked to indicate this is a very promising area for getting the costs down.

Senator **Bumpers**. Thank you, Mr. Chairman.

The **Chairman**. Thank you.

Senator Evans.

Senator **Evans**. Thank you, Mr. Chairman.

I don't want to beat a dead horse to death, because I think it is already a dead horse, but nonetheless, let me go back and just make one comment on power marketing administrations.

The concept that somehow is afloat in the land that power rates are somehow excessively low in the Pacific Northwest is one that is not borne out by current facts, especially in those areas where the utilities are drawing all of their power or essentially all of their power from the Bonneville Power Administration. For instance, in Snohomish County PUD, when you multiply their current rate times their average usage, the cost per customer per month is higher than the national average.

Now, admittedly, more of those people tend to use electricity for heating than people do elsewhere, but the idea that somehow they're way below the national average is just simply not currently true in what they pay in dollars per month.

In the areas where there are really low utility rates this proposal will not change, because those are in areas that have already implemented their own generation of power, and of course cannot be modified at all by what Bonneville is doing.

Let me turn to the breeder reactor for a moment. Could you provide—and perhaps it is best to do this for the record—a lab-by-lab breakdown of the funding that's going to be proposed for the base breeder program? I'm obviously concerned about not only the total program but what is happening in terms of the portion of it that is at Hanford.

Secretary HERRINGTON. Yes, sir. I have seen it and read it, and it is available readily. I have it here if you're interested. But we will submit that for the record.

[The information follows:]

The laboratory-by-laboratory breakdown of the FY 1986 funding that is proposed for the breeder reactor program follows. Because the breeder program was restructured in response to Congressional request, the proposed funding for the liquid metal reactor, breeder reactor and support research is also provided because it better reflects the overall reactor program funding profiles at the laboratories.

FY 1986 PLANNED FUNDING ($000)

| | Breeder Reactor Technology (included in next column) | Liquid Metal Reactor, Breeder Reactor and Supporting Research |
|---|---|---|
| Argonne National Laboratory | $38,150 | $57,100 |
| Hanford Engineering Development Laboratory | 63,000 | 80,260 |
| Oak Ridge National Laboratory | 600 | 5,144 |
| Idaho National Engineering Laboratory | 300 | 800 |
| Los Alamos National Laboratory | 800 | 1,080 |
| Energy Technology Engineering Center | 11,700 | 15,300 |
| Sandia National Laboratory | 0 | 200 |
| TOTALS | $114,550 | $159,884 |

Senator Evans. I think you could submit it, and then we could look at the various labs and the total and see where things are going.

In last year's budget we did include funds for advanced reactor concepts. We talked about modular assemblies, smaller size. Have you received any proposals from industry on these concepts?

Secretary Herrington. I don't know if we've received any proposals yet. I do know that it is under discussion at the Department, so perhaps we have. But that is an area that I put in my opening statement that we will be focusing on. I think that generally is conceded to be a beneficial area to do the R&D in.

[The information follows:]

Last year, the Department issued a Request for Proposal for development of advanced concepts for inherently safe, reliable, and marketable liquid metal reactor plants that will be competitive with alternative electrical generation sources. Five corporations responded--General Electric, Rockwell International, Westinghouse, Stone and Webster, and Technadyne Engineering Consultant Inc. Following the competitive evaluation process, General Electric and Rockwell International were selected for contract negotiations, and work was initiated in December 1984. The contracts cover an initial 15-month period extending through March 1985, with two successive 12-month options.

Rockwell's contract is for development of the conceptual design of a 330 megawatt electric pool-type reactor module that is factory fabricatable and barge shippable. General Electric's effort is directed to development of the conceptual design of a concept that employs three reactor modules to drive a 400 megawatt electric turbine; the design would also be factory fabricatable and could be shipped by both barge and rail.

Senator EVANS. Well, if anything has come in as yet on either that or the role of international collaboration, and for the record, it would be helpful to have that.

Secretary HERRINGTON. Yes, sir. We will have that to you.

[The information follows:]

The Department has no formal proposals for increased international collaboration on our advanced nuclear program. However, I understand the program staff has had private discussions with both government and industry representatives in Japan and Europe to inform them of our new initiatives and they, in turn, have informally responded positively. We are not pursuing these initial responses.

Senator EVANS. Let me—do I understand correctly, turning now to nuclear waste, do I understand correctly that the Department's most recent thinking on monitored retrievable storage is that this is not being viewed as a longterm storage alternative for deep storage, but has an intermediate or, rather, temporary kind of thing pending geologic storage?

Secretary HERRINGTON. Yes, sir, that is our position.

Senator EVANS. Will the report on this be available in June of this year?

Secretary HERRINGTON. Yes.

Senator EVANS. In the most recent study on the adequacy of the 1 mill per kilowatt hour fee for nuclear waste fund, you state that the fee will be adequate if inflation is not more than 3 percent, if there are no cost overruns in the program, lower growth in nuclear power advancement.

Do you currently feel that that is a conservative way of estimating adequacy of that fee, or that we are really likely to be adequate in the fee?

Secretary HERRINGTON. My last talk with Mr. Rusche was that this is currently on track, it is adequate, and he said there is a tremendous amount of interest, not only with the power companies but with our Department, to monitor this on an ongoing basis. There is a lot of motivation on both sides.

So I think that if it starts getting off track, we will have plenty of knowledge ahead of time. But as of this date on-track is perfectly where we're going to be.

Senator EVANS. Do I understand correctly that in your 1986 budget—and I don't have it immediately in front of me—but it seems to me in reading it that your proposals for expenditures from that fund for 1986 will exceed the receipts for that year; is that true?

Secretary HERRINGTON. I don't think that is correct. Receipts, revenues are $410 million and interest income of $87 million, so we will be, it looks like, pretty close.

Senator EVANS. And your expenditures would be what, 500 and something?

Secretary HERRINGTON. $572 million for 1986.

Senator EVANS. So you will be drawing down on the fund.

Secretary HERRINGTON. There is some carryover, yes.

Senator EVANS. I'm curious. Again, perhaps for the record, you could give me a list of projections, unless we already have it, of those nuclear power plants you expect to be operating during the remainder of the century. And I'm curious, particularly, for instance, whether the base for development of that one mill per kilowatt hour fee includes plants number 1 and 3 of the Public Power Supply System coming on line or not. It gives me a better feel.

Secretary HERRINGTON. We will submit that for the record.

[The information follows:]

Attached is a listing of the number, the name, and the electrical capacity of nuclear power units that are projected to be operating during the remainder of the century.

At present, it is projected that if the units that are now under construction and planned enter commercial operation, there will be a total of 131 units with a combined rating of 120,719 electrical megawatts by the end of this century. At the end of 1984, there were 82 licensed units in commercial full power operation having a combined capacity of 66,431 electrical megawatts.

| Year | Additional Number of Units | Electrical Capacity (Megawatts) |
|---|---|---|
| 1985 | 17 | 18,798 |
| 1986 | 11 | 11,760 |
| 1987 | 7 | 8,233 |
| 1988 | 2 | 2,365 |
| 1989 | 2 | 2,463 |
| 1990 | 1 | 1,055 |
| 1991 | 1 | 1,213 |
| Indefinite | 8 | 8,401 |
| Subtotal | 49 | 45,877 |
| In commercial operation at the end of 1984 | 82 | 66,431 |
| Total | 131 | 120,719 |

If the 8 units in the "indefinite" category are completed, such completion should take place during the remainder of this century. It should be noted that these "indefinite" units include WNP-1 and WNP-3.

The names of the units and their electrical rating in megawatts with their projected year of commercial operation are as follows:

1985

WNP-2 - 1100 MWe
Susquehanna 2 - 1065 MWe
Diablo 1 - 1084 MWe
Catawba 1 - 1145 MWe
Byron 1 - 1120 MWe
Callaway 1 - 1120 MWe
Grand Gulf 1 - 1250 MWe
Shoreham - 820 MWe
Waterford 3 - 1104 MWe

Palo Verde 1 - 1270 MWe
Limerick 1 - 1055 MWe
Diablo 2 - 1106 MWe
Fermi 2 - 1093 MWe
Watts Bar 1 - 1177 MWe
River Bend 1 - 934 MWe
Wolf Creek - 1150 MWe
Perry 1 - 1205 MWe

### 1986

Hope Creek 1 - 1067 MWe
Beaver Valley 2 - 833 MWe
Nine Mile 2 - 1100 MWe
Byron 2 - 1120 MWe
Harris 1 - 900 MWe
Millstone 3 - 1156 MWe
Seabrook 1 - 1150 MWe
Braidwood 1 - 1120 MWe
Comanche 1 - 1111 MWe
Clinton 1 - 933 MWe
Palo Verde 2 - 1270 MWe

### 1987

Braidwood 2 - 1120 MWe
So. Texas 1 - 1250 MWe
Vogtle 1 - 1160 MWe
Comanche 2 - 1111 MWe
Watts Bar 2 - 1177 MWe
Palo Verde 3 - 1270 MWe
Catawba 2 - 1145 MWe

### 1988

Vogtle 2 - 1160 MWe
Perry 2 - 1205 MWe

### 1989

Bellefonte 1 - 1213 MWe
So. Texas 2 - 1250 MWe

### 1990

Limerick 2 - 1055 MWe

### 1991

Bellefonte 2 - 1213 MWe

### Indefinite

WNP-1 - 1250 MWe
WNP-3 - 1240 MWe
Carroll 1 - 1120 MWe
Carroll 2 - 1120 MWe
Seabrook 2 - 1150 MWe
Grand Gulf 2 - 1250 MWe
Midland 1 - 460 MWe
Midland 2 - 811 MWe

Senator EVANS. Do I understand correctly on the conservation side that you are going to be increasing your effort, and will there be additional money available for the conservation programs, particularly as they relate to industrial conservation, and some of the elements of the commercial field as opposed to residential?

Secretary HERRINGTON. If you could clarify that a little bit, Senator.

Senator EVANS. Well, let's see. From your statement on conservation you were talking about moving in the conservation grant programs down over the next 5 years to zero in terms of weatherization assistance, schools, hospitals, State energy conservation programs, and extension service.

But in the second paragraph in your statement you say, "Increases are proposed in the industrial process, efficiency and waste energy reduction program areas of industrial conservation." And then it goes on from there.

Secretary HERRINGTON. There is an increase of $3 million in the industrial category, from $32 to $35 million in 1986. That is primarily in thin strip casting, $3.4 million.

Senator EVANS. What will be the nature—are those purely research programs or, as has been the case in some of the residential weatherization programs where you are assisting a utility to actually gain resources or energy, if you include or assume that conservation is a resource. In this case are you just dealing with research programs, or does any share of that industrial energy conservation program aim at actually acquiring energy through conservation or helping to do so?

Secretary HERRINGTON. The thin strip casting program is totally R&D.

Senator EVANS. Are any elements of that program aimed at anything other than R&D?

Secretary HERRINGTON. I don't think so, but I would like to check that to make sure. My feeling is that it is not; it is totally R&D.

Senator EVANS. I'm curious, and here again for the record it would be helpful if going back to the Bonneville Power Administration's budget, I think I'm right that in their proposals they are drastically reducing or curtailing the amount of money available for industrial conservation and commercial conservation areas where we still have incomplete knowledge; we don't have as good a sense of what we can gain through those two areas of conservation as we do of residential. If that in fact is the case, we need to know how much reduction there is and why, what the rationale is for it for reducing those programs.

Secretary HERRINGTON. I think the answer to that from the Department of Energy is that we are asking them to find alternative sources of financing for that. And I would like to see if we could get the request to more adequately reflect the funding that actually took place. One example we have in 1984 was, we had funding of $152 million; actually only $86.7 million was spent.

Senator EVANS. That is talking specifically about industrial and commercial?

Secretary HERRINGTON. Yes.

Senator EVANS. Well, I think that is right. I do have some direct knowledge of the fact that Bonneville was really just getting started in that field. Most of the emphasis on conservation in the past has been on the residential side, and I think that probably represents their inability to build up their program as fast. But now they're at a point where I think they have the capacity to move ahead on some programs that may produce, and I think there's a good chance that they may produce new energy cheaper and more quickly than virtually any other source we can find. And it seems to me a shame to stop not only—you're doing the research at the national level, and I think that is appropriate. At the regional level where they can carry it one step further and try out some programs, it seems to me a shame to abandon that next step beyond research which is so important if we are going to know what our energy future is going to be.

Secretary HERRINGTON. Yes, sir.

Senator EVANS. I would hope there would be another look taken at the way in which the Bonneville weatherization or the conservation budget is being put together.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Rockefeller.

Senator ROCKEFELLER. No questions, Mr. Chairman.

The CHAIRMAN. Senator Bumpers.

Senator BUMPERS. Mr. Chairman, I just have one line of questioning that I would like to go into with the Secretary. And I want to preface my remarks, Mr. Secretary, by saying that Congress can't even begin to do an effective and legitimate job on any budgeting process unless we really have the honest figures, unless we put the figures out on the table and everybody understands what we're talking about.

I have some blown up charts here which I will show you in just a moment. First of all, you are asking for $12½ billion in budget authority, and that includes not money that you are asking us for, but it includes the Power Marketing Administrations, the sale of enriched uranium and so on, does it not?

Secretary HERRINGTON. It includes all budget authority required by the various elements of the Department.

Senator BUMPERS. Well, is that the $21 billion figure?

Secretary HERRINGTON. The $21 billion figure includes budget authority plus revenues generated by the Department's activities.

Senator BUMPERS. OK. Now, if we use the traditional classifications that we have used in the Energy Department before, if you look on page 8-83 of your budget, you will see that the total authorization figure there is $9.689 billion. And if you look just above that figure, you will find that defense represents $8.046 billion or 83.1 percent of the Energy Department's budget.

Now, if we look at the classifications that you have just described in your testimony and in parts of the budget, for example, we know that defense has a much bigger share this year, but yet because you have a classification called research and development which is taking 40.8 percent of the budget, and we have waste activities, which is 12.8 percent of the budget, and yet both of those, both of those items, research and development, half of that is defense related; waste activities, 50 percent of that is defense related. And if you put that over with defense production, then we come up with the staggering statistic of 83 percent of this entire budget going for defense.

And my only reason for bringing this up is I don't think anybody in the Energy Department would come over here and deceive us simply by showing a group of classifications here, some of which have not been shown in the budget before. But the staff has done an analysis here, and I don't have any reason to quarrel with it. But when you consider that your actual authority that you're asking for is $9.689 billion and $8.046 billion of that is for defense, that comes out to a staggering 83.1 percent of this entire budget going for defense.

Let me restate that so that we understand what we are saying. You're asking for authority of $12½ billion in this budget, but when you subtract from that receipts that the Energy Department gets from the Power Marketing Administration such as Bonneville and Southwest Power and so on, all the Power Marketing Administrations, plus the sale of enriched uranium and so on, I mean, in effect, you shouldn't even have to come up here and ask for authority for that. Those are actually receipts coming into the Treasury.

If you take those receipts off of the $12½ billion, then that gets us down to the figure of $9.689 billion, which is what you're actually asking this committee and Congress to authorize. And within that figure——

The **Chairman**. Would the Senator yield for just a moment?

Senator **Bumpers**. Let me just finish the statement so the record will be clear on it.

Within that figure, $8.046 billion is for defense, or 83.1 percent. Now I would yield.

The **Chairman**. I'm a little confused, because earlier I think the Secretary indicated that the entire amount, including those so-called business activities, was $21 billion, and the receipts that are generated are out of that portion. Why would the receipts be subtracted from the remaining portion rather than that portion which generates the receipts?

Senator **Bumpers**. It's my understanding that of the $21 billion figure, some goes to the program; some of it does not come to the Treasury. Some of it goes right back to the power agency, or it goes to whatever program it is designed, whoever is selling the power. Some of that money goes back to that program and not to the Treasury.

But if you take the receipts from all the Department of Energy sales——

The **Chairman**. But the Department of Energy sales are precisely those that generate the revenues, and that is that portion that is in the $21 billion.

Senator **Bumpers**. I agree with that, Mr. Chairman. We're talking about the difference between $21 billion and $12½ billion, which is $8½ billion. Those are receipts that go back to the programs. But that is—some of the receipts come to the Treasury, as I understand it.

The **Chairman**. The net revenues.

Secretary **Herrington**. I think a better way to look at it is that $21 billion represents the total resources, both revenues and budget authority of the Department's economic activities.

Senator **Bumpers**. I would accept that.

Secretary **Herrington**. Now we have to figure out how much money we need to operate it, including those revenues which offset budget requirements, such as uranium enrichment revenues and certain revenues in our departmental administration and FERC accounts.

What we're asking for is $12.5 billion in appropriated funds to carry out our activities. Is that a clearer statement of it?

Senator **Bumpers**. What you are saying is that $2—roughly $2.8 billion then is not a wash. You're saying you have to have authority for that to operate these agencies?

Secretary **Herrington**. I can't give you the exact ones that are not a wash, but we are discussing some here like power marketing where we are not breaking even, and we need additional funds. And I don't want to talk about any specific projects.

Senator **Bumpers**. Mr. Secretary, maybe I could submit this for the record and ask you to supply this to me and the committee at the earliest possible time before we go to mark up on this. Let me also say, I don't care what the figure is. I mean if defense is 90 percent of it or 30 percent, that isn't all that relevant to me. What is relevant is that we have a clear picture of how much money DOE is getting and what it is going for. And if I think that we are spending too much on defense in energy, then I will say so during markup. But right now I'm just trying to get this straight for all of us so we will know—so we all are operating with the same figures.

The **Chairman**. Would the Senator yield?

Senator **Bumpers**. Yes.

The **Chairman**. In providing us with the information which has been requested, could you separate out the items which are truly regenerated within an agency or activity that doesn't require appropriation? And I will tell you what I'm getting at. If I recall correctly, all of the revenues flow back to the Treasury and require appropriation with the exception of certain of the Power Marketing Administration funds, and that each of them has been in recent years granted a revolving fund which is not subject to appropriation, if I recall correctly.

Secretary **Herrington**. Some revenues are retained by the Department to offset budget authority, some are returned to the Treasury; and the Bonneville and Western Power Marketing Administrations have revolving funds not subject to appropriation.

The **Chairman**. But if you could provide us for the record gross revenues, the amounts by activity in general terms, and the amount of that which comes from activity which is subject to appropriations and that which is not subject to appropriations acts.

Secretary **Herrington**. I think we understand the question on what you need, and I think it is fairly easy to do it.

Senator Bumpers, I would agree with you. You need to have the accurate figures in order to mark up properly, and you will get no problem from us on that. I want to make sure that we get the right question down so that we can be responsive to it, sir.

Senator **Bumpers**. Mr. Secretary, for the record—and I think the chairman has stated this fairly well as to what we're after—but I want to point out that on page 8-88 of the Energy Department's budget there is a summary of what you're asking for, and in the middle of the page there it says, "Total Department of Energy," and that is $9.688 billion, really rounded off $9.689 billion. And then if you go back and look on page 8-83, another summary says, "Total Atomic Energy Defense Activities," and that figure is $8.047 billion, or 83 percent of the other figure.

Secretary **Herrington**. Senator, we have looked at our executive summary in our budget and can't find that figure. We only conclude it must be the OMB submittal that came up.

Senator **Bumpers**. This is the document. It says "Budget of the United States Government."

Secretary **Herrington**. I would like to get back to you on that and comment on those particular figures you have there.

[The information follows:]

The OMB submittal which deducts all revenues earned by the Department's activities, except Bonneville's revovling fund, even though most of these revenues do not directly offset our need for appropriated budget authority.

### Department of Energy
### Request Summary
### By Appropriation
### (Dollars in Thousands)

| Appropriation Account | | FY 1986 |
|---|---|---|
| Energy Supply Research and Development | | $ 1,969,671 |
| Uranium Enrichment | Appropriation Total | 1,612,700 |
| | less Revenues | -1,612,700 |
| | | 0 |
| General Sciences | | 685,400 |
| Atomic Energy Defense Activities | | 8,046,900 |
| Departmental Administration | | |
| | Appropriation Total | 414,652 |
| | less Revenues | -244,228 |
| | | 170,424 |
| Power Marketing Activities | | |
| Alaska Power Administration | | 0 |
| Bonneville Power Administration | | 263,200 |
| Southeastern Power Administration | | 39,800 |
| Southwestern Power Administration | | 29,500 |
| Western Area Power Administration | | 207,500 |
| | | 540,000 |
| Federal Energy Regulatory Commission | | |
| | Appropriation Total | 95,568 |
| | less Revenues | -66,077 |
| | | 29,491 |
| Nuclear Waste Fund | | 571,460 |
| Geothermal Resource Development Fund | | 72 |
| Subtotal, Energy and Water Development Activities | | 12,013,418 |
| Fossil Energy Research and Development | | |
| | Appropriation Total | 156,909 |
| | Advance Appropriation | +15,000 |
| | | 171,909 |
| Naval Petroleum and Oil Shale Reserves | | 13,649 |
| Energy Conservation | | 76,130 |
| Energy Regulation | | 23,092 |
| Emergency Preparedness | | 5,873 |
| Energy Information Activities | | 58,900 |

| | |
|---|---|
| Payments to States | 570 |
| Subtotal, Interior and Related Agencies Activities | 450,123 |
| Subtotal, Department of Energy (Appropriated Funds) | 12,463,541 |
| Less Receipts: | |
| Naval Petroleum Reserves | -1,141,483 |
| Power Marketing Administrations | -1,139,029 |
| Nuclear Waste Fund | -401,100 |
| Nuclear Waste Fund Interest | -86,640 |
| Miscellaneous | -6,600 |
| Subtotal, Receipts | -2,774,852 |
| Total, Department of Energy (Net Request) | $ 9,688,689 |

Senator BUMPERS. Now, do we need to talk about it any more, or do you think you're clear on the information I want?

Secretary HERRINGTON. I think I am clear, sir. I think one of the points I would like to make is that I don't think you can lock all of this thing into defense. From the breakout I have seen internally in the Department, our defense production is about 38 percent, $4.8 billion. I don't think you can put all the waste activities into the defense category, and I certainly don't think all of the R&D can go into the defense category.

We do a lot of R&D that has commercial plus defense aspects to it. I want to get out of the trap of trying to lump everything into the defense category. There are genuine activities in this Department that are working not in a defense mode, and I think some of the labs would take exception to having their whole activities lumped into defense activities. But it is far less than 80 percent.

Senator BUMPERS. Mr. Secretary, last year I was in a debate with an Assistant Secretary of Defense on what the total defense outlays were going to be in 1985, and I misspoke myself during that debate. I later apologized to him because I said that the figures, the figure of something like $200 billion did not include what we spend for defense in the Energy Department, and he said it did. It turned out that it did. He was correct.

But in any event, it is important for us to know what the total defense figures are in this country as well as in this committee if we are going to have an intelligent, sensible debate on the floor of the Senate about how much is enough and how much is too much.

Secretary HERRINGTON. I would agree, sir.

Senator BUMPERS. All I'm trying to do is to sort those figures out.

Now, it is my information, just for whatever it is worth, that what you show this year as research and development that fully—that is 40.8 percent of the budget, and fully half of that is defense-related. In the area of waste activities, which is 12.8 percent of the budget, fully half of that is defense.

Now, those are the kinds of figures that we want you to submit for the record, Mr. Secretary.

Secretary HERRINGTON. Certainly. We will, sir. We will get those figures out. I have some reactions to those figures, but I think the best way is to get the information to you to let you make your judgments on them.

The CHAIRMAN. Mr. Secretary, in doing that you're going to have to apply some judgment to the distribution of expenses on some items that are pretty hard to separate. One of the reasons we have kept defense and nondefense nuclear activities administered in the same place is because they overlap. And I don't want to overstate that, because we have at the same time on the material side, including waste management, kept them separated, almost religiously so, to make certain that there was no crossover between the military and non-defense-related activities.

But take a look at a project like GCEP, designed to enrich uranium, or any of the other uranium enrichment facilities. How much are civilian and how much are military? Then we take a look at things like laser isotope separation, which is a research program. How much of that is civilian and how much is military?

Senator BUMPERS. Do the best you can, Mr. Secretary.

The CHAIRMAN. And all I'm suggesting is that in that category you may wish to--you may be able to make an estimate of how much should be assigned one way or the other, or you may wish to submit a separate item that indicates that it is impossible to make an allocation. And I don't know.

Secretary HERRINGTON. We will try to be most helpful to the committee in that light.

The CHAIRMAN. Mr. Secretary, you asked a question a while ago about solar energy, and if my information is correct, you had an internal study done recently with respect to the cost and the promise of solar energy. Are you aware of such a definitive study?

Secretary HERRINGTON. I've heard of it, yes.

The CHAIRMAN. I wonder if you could make a copy of that study available to the committee?

Secretary HERRINGTON. Yes, sir.

[The information follows:]

Provided is a summary report prepared by the Office of Conservation and Renewable Energy which was completed in February 1985. The report summarizes a comprehensive internal review of multiyear renewable energy applied research priorities according to energy contribution potential of various technology options; the effectiveness of research and development activities in progressing towards this potential; and the appropriate federal role in accomplishing R&D priorities.

[COMMITTEE NOTE.—The report has been retained in committee files. Following is the executive summary:]

U.S. Department of Energy
Office of Conservation and Renewable Energy

# Renewable Energy Research and Development Outlook

Volume 1

February 1985

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# Foreword

The Nation is blessed with a broad variety of energy resources, creative scientists, inventive and productive industry, and energy producers and users with sound judgment and enterprise. The central energy policy goals of the Nation are to promote economically efficient use of energy resources by minimizing Federal control and involvement in energy markets, and to increase the range of technological options available to the private sector.

Several renewable energy technologies currently provide valuable amounts of power to the national energy supply system. These and other renewable energy options show extraordinary promise for additional contributions within the highly competitive and diversified energy marketplace of the future. While the remaining scientific and technical challenges to realizing this promise are considerable, they can be met by industry and Government cooperatively pursuing a vigorous but well structured research agenda over the next several years.

This report summarizes a recent evaluation conducted by the Department of Energy (DOE) to: gauge the potential payoff of numerous renewable energy technology options; prioritize the research and development objectives obtainable over the next 5 years for progressing towards this potential; and identify the Government's role in accomplishing these priorities. DOE believes that the logic of the framework developed for this evaluation is useful for characterizing priorities across an extremely diverse family of renewable energy technologies. The findings of this report provide a basis for assisting DOE management in refining near-term research and development priorities for renewable energy. The findings of this study recognize the significant technical and industrial progress of the past several years as well as the remaining objectives that must be accomplished to support the long-term viability of these promising energy supply alternatives.

This report should be viewed as a point of departure for further interaction between DOE and industry rather than as a conclusion in and of itself. The findings of this evaluation are intended to stimulate dialogue within the research and development community on priorities. These research and development priorities serve as consistent input to the Multiyear Program Plans (MYPP's) that are currently being prepared for each major category of renewable energy technology. Reviewers of this report are encouraged to directly participate in the development of these MYPP's.

At an appropriate time in the future, DOE intends to update and refine comprehensive renewable energy priorities within the framework developed for this evaluation. The Department anticipates that the additional insights gained through the MYPP process can lead to further understanding and consensus within the Nation as to research priorities appropriate to this promising family of energy supply alternatives.

# Executive Summary

Collectively, the renewable energy technologies represent a significant opportunity to increase diversity and flexibility within the energy supply system. A significant portion of the renewable energy technology potential can be realized through sustained cooperation between industry and government. This cooperation is required to establish the body of knowledge necessary for industrial development of competitive technology and for informed decisionmaking by the Nation's energy producers and consumers when comparing renewable energy technologies to other energy supply alternatives.

Renewable energy represents an extremely broad field of technology with a large number of potentially viable technology options, which include plausible combinations of the various natural resources, conversion processes, and energy products. Several of these technology options currently make important contributions to national, regional, and local requirements for energy. Others will require additional research and development before the private sector can make factually-based decisions regarding their viability. Consistent with the policies articulated within the National Energy Policy Plan IV (NEPP IV) and recommendations from studies by the Energy Research Advisory Board and others, the Federal investment in renewable energy research and development should generally focus on:

- Renewable energy technology options having the potential to make a significant contribution to the energy supply system as a consequence of successful research and development.
- R&D activities which can be most effective in advancing technology towards the performance objectives most critical to realize that potential.
- R&D activities that the private sector cannot reasonably undertake on its own.

This report summarizes a comprehensive evaluation of renewable energy technologies and their relative potential contribution to the Nation's energy supply. It employs a process and framework developed by the DOE renewable energy management. The purpose of this evaluation is to amplify the above criteria and to systematically evaluate comprehensive research and development priorities for the next 5 years by building on previous technical evaluations. The broad conclusions that may be drawn from this evaluation include:

- When viewed as an energy reserve, in a manner similar to reserves associated with other major energy resources (e.g., oil, gas, coal), renewable energy has an Energy Contribution Potential (ECP) substantially in excess of current NEPP IV market penetration estimates.
- As energy reserves, renewable energy has the potential through research advancements to achieve competitive viability in up to some 80 percent of the national annual demand for energy in the year 2010 as broadly described by the NEPP IV (scenario B).
- These reserves are potentially significant in every region of the country and in each major demand sector—residential, commercial, industrial, transportation—of the economy.
- The evaluation framework permits discrimination among technology options as well as research activities. For example, of the hundreds of theoretical renewable energy technology options, 72 were identified as having sufficient promise to estimate their Energy Contribution Potential (ECP). Of these, some 43 options had sufficiently large ECP to warrant a detailed evaluation of research and development priorities.
- The energy product mix—electricity, liquid and gaseous fuels, thermal energy—produced by renewable energy technology options is consistent with the trends in primary energy supply described within NEPP IV forecasts.

- Evaluation of the Federal role in renewable energy R&D is most appropriately performed based on the characteristics of detailed discrete research activities. This allows consideration of varying degrees of industrial and technical maturity within an extremely diverse field of technology.

The report additionally summarizes findings on the average level of emphasis in major R&D categories for each technology over the next 5 years, and how this emphasis compares to the levels proposed for FY 1985. These findings, presented in Section 4, also identify the R&D categories within each technology that are most sensitive to variations in overall renewable energy funding. These sensitive areas can generally be considered renewable energy R&D investments at the margin within the DOE budgetary process based on the criteria used in this evaluation. Accordingly, these areas should receive special attention in the MYPP process to permit further refinement of priorities. General conclusions regarding trends in R&D priorities for each technology are summarized as follows:

- **Biofuels.** The results of the evaluation reinforce earlier Energy Research and Advisory Board (ERAB) conclusions on the increasing importance of research across the major categories of feedstocks—especially short rotation hardwoods and herbaceous crops—where historical methods of R&D can be complemented by use of emerging biotechnology techniques.
- **Photovoltaics.** The evaluation confirmed the high priority of a balanced materials research program in single junction and multijunction cell research. This should be augmented by an increasingly strong effort on new materials concepts capable of accomplishing performance breakthroughs.
- **Wind Energy.** The evaluation concludes that aerodynamics research represents a top priority that should be coupled with a strong program in structural dynamics research.
- **Solar Thermal.** The evaluation supports a balanced materials and components R&D effort to resolve a variety of performance-related issues that apply to several major technology options. The evaluation points to a potential need to further focus research within central receiver technology options to balance the effort among technology options.
- **Solar Buildings.** The evaluation concludes that the current emphasis placed upon materials and components research is indicative of average priority over the next several years. The evaluation also indicates the importance of increased emphasis on methods to predict the performance of solar systems integrated with the building and its HVAC system.
- **Geothermal.** The evaluation concludes that a number of generic R&D activities warrant a continuing emphasis over the next several years to accomplish important midterm technology development objectives for the hydrothermal technology options. A supporting R&D effort reasonably balanced for the options associated with the other major geothermal resources appears warranted. Research priorities for magma and hot dry rock should be further refined through the MYPP process.
- **Ocean Energy.** A continued program in Ocean Thermal Energy Conversion (OTEC) technology is supported by this evaluation with research focused on small-scale experimental verification. A sustaining effort across key thermodynamic, materials, and environmental issues is also supported.
- **Hydropower.** Monitoring the completion of previously funded projects and the transfer of results to industry are the primary activities supported by the evaluation. Some highly collaborative activities are supported at the highest investment levels.

DOE believes that the methods used in this evaluation bring together a reasonable set of quantitative and qualitative evaluation factors and establish an up-to-date road map of R&D requirements. This road map will: (1) facilitate a continuing national discussion of technical priorities; (2) prove useful in communicating selectivity to private sector or Federal researchers; and (3) focus renewable energy R&D investments in areas of the greatest potential payoff.

The CHAIRMAN. It is my understanding, too, that over a period of time we have put appropriated funds in the amount of $2 billion into research and development, direct expenditure by the Federal Government, and we've also had utilized tax credits in the economy of $1.6 billion, which is not quite as much as the direct expenditure. It's my understanding that although we have reduced the amount that you're proposing in this budget for direct expenditure, the administration proposes to allow tax credits to be phased out completely. Am I correct?

Secretary HERRINGTON. Yes, sir; the Treasury proposal would.

The CHAIRMAN. Do you know or does the study show which has yielded the greater efficiency of expenditure: the direct Federal expenditure or the tax credit?

Secretary HERRINGTON. I would have to submit that for the record, Senator. We looked at this a couple of weeks ago. Senator Johnston had a question on this. And there are different numbers in it. I would like the chance to define this more clearly.

[The information follows:

Our study did not address the question of the relative effectiveness of direct Federal expenditures versus tax credits. We attempted to identify the most promising areas of R&D for renewable energy and then make judgments about the appropriate Federal role in each area based on technical risk, time required for payoff, and the potential funding capability of the private sector.

The CHAIRMAN. If you would provide that for the record, please. I'm very much in favor of the continuation of research and appropriate development within the field of solar energy application, and you indicate it's your opinion that this is a very promising area. We've been waiting for several years to get the breakthrough on production, and maybe the films will be such a breakthrough in cost. But when we talk about solar energy being—photovoltaics, the direct conversion and then electricity being competitive in cost today, we're talking about very specialized installations, are we not?

Secretary HERRINGTON. Yes.

The CHAIRMAN. These are just not general additions to the electric consumption of the average industry or homeowner in this country.

Secretary HERRINGTON. It would be hard to say at what scale, I mean from the smallest scale on up. I passed a remote time clock on an irrigation project about 3 weeks ago at an area out in the country where they didn't have any electricity, and on top of this remote thing was a photovoltaic cell that had been working for over 5 years.

The CHAIRMAN. That remote application was because it cost a great deal to run a power line out there.

Secretary HERRINGTON. Exactly.

The CHAIRMAN. Not because it would have been less expensive if there had been power available at that site already.

Secretary HERRINGTON. That is correct, sir.

The CHAIRMAN. The reason I asked that, in my recollection—and if you can respond for the record, I would welcome it; my recollection is that in comparative cost to baseload electricity in the ordinary utility systems of this country, photovoltaics are still on the order of 19 times as expensive as the alternative.

Secretary HERRINGTON. I think that is correct.

[The information follows:]

While the current cost of baseload electricity varies by utility system and class of customer, a representative estimate is in the vicinity of three cents per kilowatthour. The cost of current peak load electricity can range as high as two to three times that average and can approach ten cents per kilowatthour. The cost of electricity generated by photovoltaic systems also varies by geographic area depending upon the local characteristics of sunlight and other factors such as the price of land, prevailing labor rates, and the cost of transporting the photovoltaic cells to point of installation. On average, a cost of fifty cents per kilowatthour is considered representative of current photovoltaic experience in larger scale utility grade installations. Accordingly, the cost of photovoltaic electricity is currently approximately five times the cost of peak load conventional electricity and twenty times the current cost of electricity from coal or nuclear baseload generating stations.

The CHAIRMAN. In a number of other areas they are about five times as expensive. It is only when you run into very lower power consumptions or very remote stations that you get into the cost comparisons that indicate that current technology yields cost effective electric application; am I correct?

Secretary HERRINGTON. That is correct. It does, however—that field or the people working in it show promise of getting those costs down, and I think there is legitimate scientific basis for that. So it is a field that we want to look at.

The CHAIRMAN. I agree with that, and because there is legitimate scientific basis for the hope that we can get a cost breakthrough, we should continue the research and development. But I certainly would not want people to believe that we are right at the point where it can compete with baseload electric power generation in the electric grids of this country, which I think until some substantial breakthrough is achieved simply isn't a fact.

Secretary HERRINGTON. I would agree.

The CHAIRMAN. We have a number of other questions to submit for the record, and other members may well have also. I would hope that those written questions would be submitted by close of business today so we can transmit them to you and get responses back in time for us to consider in our budget request.

Thank you very much, Mr. Secretary. And I might just indicate that for the record what others have said, for your first voyage before this committee you have done an exceptionally, perhaps even extraordinary job.

Thank you, Mr. Secretary.

Secretary HERRINGTON. Thank you, Mr. Chairman.

The CHAIRMAN. The committee is adjourned.

[Whereupon, at 12:15 p.m., the hearing was adjourned.]

# APPENDIX VI

## Response From Secretary Herrington to Additional Committee Questions

**Department of Energy**
**Washington, D.C. 20585**

March 15, 1985

Honorable James A. McClure
Chairman
Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

On March 4, 1985, Secretary Herrington appeared before the Committee on Energy and Natural Resources to discuss the FY 1986 authorization for the Department of Energy.

Following that hearing, you submitted written questions to supplement the record. Enclosed are the answers to those questions with the exception of Questions 34-50, 66, 79-82, 132 and 133, relating to the Power Marketing Administrations. The answers also have been sent to the Committee staff.

If you have any questions, please call Cathy Hamilton of my staff on 252-4277. She will be happy to assist you.

Sincerely,

Robert G. Rabben
Assistant General Counsel
for Legislation

Enclosures

Answers to Questions Submitted to

The Honorable John S. Herrington
Secretary, Department of Energy

from the

Committee on Energy and Natural Resources

March 4, 1985

Questions 1 - 48, Submitted by the Majority
Questions 49 - 58, Submitted by Senator Hatfield
Questions 59 - 65, Submitted by Senator Weicker
Questions 66 - 67, Submitted by Senator Wallop
Questions 68 - 78, Submitted by Senator Warner
Questions 79 - 82, Submitted by Senator Murkowski
Questions 83 - 117, Submitted by Senator Johnston
Questions 118 - 121, Submitted by Senator Ford
Questions 122 - 133, Submitted by Senator Metzenbaum
Questions 134 - 137, Submitted by Senator Bingaman

# POST-HEARING QUESTIONS AND ANSWERS

RELATING TO THE

MARCH 4, 1985, HEARING

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

WITNESS: SECRETARY HERRINGTON

## QUESTIONS FROM THE MAJORITY

## FY 1986 LEGISLATIVE INITIATIVES

Question 1: Would you provide for the record a list of legislative initiatives accompanying the President's fiscal year 1986 budget? Would you include:

a. a statement of purpose;

b. proposed language (if available at this time), but, if not, an indication of when it will be available;

c. an explanation of the language; and

d. whether, in your judgment, such legislation woud be forwarded to the Energy and Natural Resources Committee or to the Appropriations Committee?

Answer: The following is a list of Department of Energy legislative initiatives accompanying the President's FY 1986 budget:

1. The Department's Annual Authorizations

   o Authorize appropriations in FY 86 and FY 87 for (1) national security programs, (2) civilian energy programs, and (3) the naval petroleum reserves (NPR).

   o The NPR authorization will include authority for conventional oil and gas leasing in the Naval Oil Shale Reserves.

   o The three authorization bills will be transmitted to the Congress within the next two weeks. I expect that, as usual, the national security and NPR authorizations will be referred to the Armed Services Committee and the civilian authorization to the Energy and Natural Resources Committee.

2. Distribution of Overcharge Funds

   - Provides a mechanism for the orderly disposition of funds received from the petroleum industry as a result of alleged violation of petroleum price regulations.

   - We plan to submit this proposal to the Congress shortly, and I expect that it will be referred to the Energy and Natural Resources Committee.

3. Sale of the Alaska Power Administration

   - Authorizes the sale to the State of Alaska

   - We plan to submit this proposal to the Congress shortly. I expect that it will be referred to the Energy and Natural Resources Committee.

4. Small Hydroelectric Project Regulatory Relief

o Extends FERC authority to waive Federal Power Act licensing requirements for hydroelectric projects of 15 megawatts or less.

o We plan to submit this proposal shortly and expect it to be referred to the Energy and Natural Resources Committee.

5. FERC User Fees

o Authorizes FERC to charge fees for licensing of natural gas and oil pipelines, as well as other projects.

o FERC plans to submit this proposal shortly and we expect it to be referred to the Energy and Natural Resources Committee.

6. Repeal of Personnel Floors

o Repeals the mandatory personnel floors, established in law, for the Office of the Assistant Secretaries for Fossil Energy and for Conservation and Renewable Energy, and other personnel restrictions.

- o The Administration transmitted this proposal to the Congress with the President's budget. It appears in the Budget Appendix, at page I-J30. I expect it to be referred to the Appropriations Committee.

7. Repayment of Power Marketing Administration Loans

   - o Changes procedures for repayment of loans and would charge current interest rates.

   - o The Administration transmitted the proposal to the Congress with the President's Budget. It appears in the Budget Appendix, at page I-J30. I expect it to be referred to the Appropriations Committee.

In addition to these legislative initiatives a major initiative will be proposed to reform the regulatory and licensing process of the Nuclear Regulatory Commission. We also expect to be considering, with the Energy and Natural Resources Committee, natural gas decontrol and the reauthorization of the Energy Policy and Conservation Act.

## QUESTIONS FROM THE MAJORITY

## FY 1986 LEGISLATIVE INITIATIVES

## FY 1985 SUPPLEMENTAL AND DEFERRAL REQUESTS

Question 2: Would you provide for the record a list of any fiscal year 1985 supplemental or deferral requests by appropriations account?

Answer:

### FY 1985 Supplemental Requests

| | |
|---|---|
| Federal Energy Regulatory Commission-pay raise | 1,627,000 |
| Energy Information Administration-pay raise | 495,000 |
| Total DOE Supplemental Requests | 2,122,000 |

### FY 1985 Deferral Requests

| Account | Amount |
|---|---|
| Uranium Supply and Enrichment Activities | 90,000,000* |
| Departmental Administration | 8,501,000 |
| Southeastern Power Administration | 15,961,000 |
| Southwestern Power Administration | 8,774,000 |
| Western Area Power Administration | 30,300,000 |
| Fossil Energy Research and Development | 48,396,646 |
| Fossil Energy Construction | 5,137,383 |
| Energy Conservation | 5,771,940* |
| Strategic Petroleum Reserve | 270,738,000 |
| Strategic Petroleum Reserve Petroleum Acct. | 827,028,316 |
| Naval Petroleum and Oil Shale Reserve | 155,667,000 |
| Alternate Fuels Production | 1,237,963* |
| Total DOE Deferral Requests | 1,467,513,248 |

*--Pending submission to Congress

## QUESTIONS FROM THE MAJORITY

## FY 1986 LEGISLATIVE INITIATIVES

## FY 1985 AND FY 1986 RESCISSIONS AND DEFERRALS ASSUMED BY THE PROPOSED BUDGET FOR FY 1986

Question 3: Would you provide for the record a list of any current or anticipated fiscal years 1985 and 1986 rescissions or deferrals pursuant to the Budget and Impoundment Control Act assumed by the proposed budget for fiscal year 1986; copies of the relevant budget justification; and the status of such proposed actions?

Answer:

### FY 1985 Proposed Rescissions

These rescissions are proposed to effect FY 1985 savings in Congressionally specified management categories pursuant to section 2901 of the Deficit Reduction Act of 1984. These rescissions were submitted by the President to Congress on February 6, 1985. The FY 1985 budget authority reductions as a result of the proposed rescissions are listed by account as follows:

| Rescission Number | Account | Budget Authority |
|---|---|---|
| R85-80 | Atomic Energy Defense Activities | $ 8,280,000 |
| R85-81 | General Science and Research Activities | 38,000 |
| R85-82 | Energy Supply, Research and Development Activities | 2,676,000 |
| R85-83 | Uranium Supply and Enrichment Activities | 968,000 |
| R85-84 | Fossil Energy Research and Development | 3,276,000 |
| R85-85 | Fossil Energy Construction | 860,000 |
| R85-86 | Naval Petroleum and Shale Reserves | 181,000 |
| R85-87 | Energy Conservation | 931,000 |
| R85-88 | Strategic Petroleum Reserve | 156,000 |
| R85-89 | Energy Information Administration | 346,000 |

| Rescission Number | Account | Budget Authority |
|---|---|---|
| R85-90 | Emergency Preparedness | $ 51,000 |
| R85-91 | Economic Regulation | 156,000 |
| R85-92 | Federal Energy Regulatory Commission | 204,000 |
| R85-93 | Alternative Fuels Production | 23,000 |
| R85-94 | Operation and Maintenance, Alaska Power Administration | 29,000 |
| R85-95 | Operation and Maintenance, Southeastern Power Administration | 15,000 |
| R85-96 | Operation and Maintenance, Southwestern Power Administration | 243,000 |
| R85-97 | Construction, Rehabilitation, Operation and Maintenance WAPA | 432,000 |
| R85-98 | Departmental Administration | 2,786,000 |

## FY 1985 Current Deferrals Assumed by the Proposed Budget for FY 1986

These deferrals are proposed in the FY 1986 budget to be used as offsets to the FY 1986 budget authority requests for these accounts. The justifications for these deferrals are included in the Department's detailed FY 1986 Congressional Budget Request previously provided to your Committee.

| Account | Budget Authority |
|---|---|
| Uranium Supply and Enrichment Activities | $90,000,000 |
| Departmental Administration | 8,501,000 |
| Southeastern Power Administration | 15,361,000 |
| Southwestern Power Administration | 3,774,000 |

| Account | Budget Authority |
|---|---|
| Western Area Power Administration | $30,300,000 |
| Fossil Energy Research, Development, and Construction | 53,534,029 |
| Energy Conservation | 4,000,000 1/ |
| Strategic Petroleum Reserve | 175,136,000 2/ |
| Naval Petroleum and Oil Shale Reserve | 155,667,000 |
| Alternate Fuels Production | 1,149,000 3/ |
| Total DOE Deferral Requests | $543,022,029 |

1/ A current deferral request of $5,771,940 has been submitted of which $4,000,000 is proposed as an offset to FY 1986 Budget Authority.

2/ A current deferral request of $270,738,000 has been submitted of which $175,136,000 is proposed as an offset to FY 1986 Budget Authority. Also, the Strategic Petroleum Reserve Petroleum Off Budget Account has a current deferral request of $327,028,318, of which none is proposed as an offset to FY 1986 Budget Authority since the funds are in excess of budgetary requirements.

3/ A current deferral request of $1,237,963 has been submitted of which $1,149,000 is proposed as a transfer to offset the FY 1986 Budget Authority in the Fossil Energy Account.

## FY 1985 Anticipated Deferral Assumed by the Proposed Budget for FY 1986

This anticipated deferral is included in the FY 1986 budget to be used as an offset to the FY 1986 budget authority request for this account; however, the program source has not yet been determined.

| | |
|---|---|
| Fossil Energy Research, Development and Construction | $9,379,971 |

## QUESTIONS FROM THE MAJORITY

## STATE AND LOCAL PROGRAMS

Question 4a: Does the Department foresee the need for legislation to authorize the proposed expansion of State and local participation in energy conservation programs?

Answer: The Department does not believe legislation is essential to authorize expansion of State and local participation in energy conservation programs. All of these programs have a history of continuing and deep involvement in the programs by these sectors. However, certain legislative changes might enhance and encourage the proposed transition, for example, by removing unnecessary prescriptive requirements. Such possible changes are currently being reviewed.

Question 4b: If legislation is not needed, how does DOE plan to accomplish this expansion, while phasing-out Federal participation? Can this be accomplished without seriously damaging state and local assistance programs?

Answer: The rationale is based on the Department's conclusion, borne out of the many years' experience with these programs, that there are many alternative ways to support State and Local assistance programs or, at least, those program activities that have proven, significant benefits. We intend to work extensively with States, local governments, private enterprise and other appropriate groups in developing these other ways to promote non-Federal support for energy efficiency programs. We have already begun several demonstration projects illustrating innovative financing mechanisms appropriate to some of the State and Local assistance programs target sectors.

The phase-down of these programs is proposed in the belief that, with the Federal government making a multiyear commitment to these activities and assisting in developing other sources of support, the States and the private sector will gradually increase their funding levels and their success in providing non-Federal support for the most beneficial programs.

Question 4c: DOE has suggested that by re-directing the Federal role in state and local assistance programs toward encouragement of expanded state and local participation, weatherization of low-income housing might be completed in 5-6 years, rather than DOE's currently projected 50-60 years. Does this mean that DOE expects low-income housing weatherization to be largely completed in FY 90 when the proposed termination of Federal participation occurs, or is DOE actually looking 10-12 years ahead and assuming maximum state and local participation?

Answer: The Department is attempting to find a way to activate more State and local participation as well as increased voluntary private sector involvement. We believe this will occur more rapidly if Federal sector funds are phased out. We believe the work can be completed within 10 years, and that Federal funding can be eliminated after 5 years.

## QUESTIONS FROM THE MAJORITY

### CONSERVATION BUDGETS

| | |
|---|---|
| Question 5: | Would you please provide the Committee with the conservation program's request to the Department and the Department's request to OMB? |
| Answer: | The requested FY 1986 budgets are attached. |

(Committee Note.--Attachments retained in Committee files.)

## QUESTIONS FROM THE MAJORITY

## ENERGY CONSERVATION

Question 6: You are proposing a decrease of 54 Full-Time Equivalents in Energy Conservation Program direction staffing. What management initiatives will be implemented to avoid adverse impact on energy conservation programs?

Answer: We intend to implement several management initiatives to improve the efficiency and operation of the Energy Conservation Programs. These include:

- Utilize a greater degree of automation
- Complete implementation of the recently approved reorganization to eliminate layering, overlapping functions, unnecessary organizational levels and inappropriate grade structures
- Develop better strategies to motivate managers and employees to achieve productivity goals.

## QUESTIONS FROM THE MAJORITY

- ENERGY CONSERVATION

Question 7: In response to a question raised during the 1984 oversight hearing, then-Secretary Hodel stated that a substantial amount of energy conservation research and development is supported by the private sector and that the level of private sector research and development probably significantly exceeds Federal expenditures in this area. What analyses has DOE conducted subsequently that justify those conclusions?

Answer: The determination as to how much the private sector is investing in this area is difficult and depends a great deal on how companies define "energy", "R&D", and "Conservation." One of the sources for data on R&D investment is the National Science Foundation's Annual Report on Investments. In an attempt to more accurately determine these investments, Battelle Memorial Institute recently completed an analysis of detailed data collected by the National Science Foundation for the period 1972-1982. The resulting report shows that representative energy intensive industries made energy conservation R&D expenditures of approximately $87 million in 1982. This is the investment made by those industries to improve the efficiency of their own energy use. Although this investment is significantly lower than the comparable investment made in the peak year (1979) of $207 million, it is none the less substantially greater than the Department's industrial conservation budget for 1982 which was $29 million.

## QUESTIONS FROM THE MAJORITY

## ENERGY CONSERVATION

| | |
|---|---|
| Question 8: | DOE has taken the position that, in Science and Technology base activities, budget resources should be concentrated on longer-term basic and applied research, leaving nearer-term development to industry. What analyses has DOE conducted to determine the effect of this approach on current private sector conservation initiatives? |
| Answer: | Whereas no analyses were conducted specifically to determine the effect of this approach on private ctor initiatives, a study (Characterization of Business Activities for Seven Energy-Intensive Industries, August 1984, Reliance Energy Services) was conducted to characterize business activities in the five-year period from 1978-1982. This was a turbulent period and included rising energy prices, inflation, high interest rates, recession, environmental concerns, technological innovation, and foreign competition. Consequently, the activities of the 21 companies were quite diverse. Some focused on improved operations, including energy conservation, others emphasized improved markets including mergers. Although no clear general conclusions are possible based on this analysis, trends may be seen in the anecdotal experience of conservation programs. For example, the auto industry has assumed a much larger share of the cost of development of the auto |

gas turbine engine and desires that the Department's contribution to the adiabatic diesel be limited to component development while the industry will assume the full financial responsibility of system integration.

## QUESTIONS FROM THE MAJORITY

## PETROLEUM OVERCHARGE RESTITUTION FUND

Question 9: You again have proposed that the Petroleum Overcharge Restitution Fund monies now in escrow, or expected to be placed in escrow, be used to fund certain energy conservation programs of the Department of Energy, and the Fuel Assistance Program with the Department of Health and Human Services.

a. When can we expect to receive that legislation and will there be changes from the legislation offered in the 98th Congress?

b. What is the current amount of overcharge funds in escrow?

c. Please provide a projection of escrow funds available in FY85, FY86 and FY87, including a breakdown of that portion that would go to HHS and the amount that would remain in DOE.

Answer: a. We hope to forward our legislative proposal within the next two weeks. The basic concept -- that the Department first attempts to identify and recompense those who were directly overcharged and then uses the residue to fund the programs you mentioned -- will remain the same, but I expect that there will be some changes from last year's proposal.

b. As of February 1, 1985 there was more than $850 million in escrow, of which $815 million has been referred to the Office of Hearings and Appeals for processing under that Office's special refund procedures (10 C.F.R. 205, Subpart V).

c. A projection of the total escrow funds and the portion of these funds expected to be available for second-stage distribution (following refunds to directly injured parties) over the next several years is as follows:

| | Total in Escrow | 2nd Stage Distribution |
|---|---|---|
| FY 85: | $1.1 Billion | $ .1 Billion |
| FY 86: | $3.2 Billion | $ 2.9 Billion |
| FY 87: | $1.3 Billion | $ 1.1 Billion |
| FY 88 | $2.3 Billion | $ 2.0 Billion |

The President's FY 1986 budget requests $152,890,000 for the Department's weatherization assistance program and $37,134,000 for grants to schools and hospitals, with a decrease of 20% from FY 1985 levels each year until 1990 when these programs would be phased out. The budget proposes that these programs be financed entirely from overcharge escrow funds in FY 1986 and each succeeding year until Federal funding for them is phased out. The balance of escrow funds available for second-stage distribution each year would be used to finance the low income home energy assistance program in the Department of Health and Human Services.

## QUESTIONS FROM BY THE MAJORITY

### EIA

Question 10: Would you provide the Committee with a copy of the Energy Information Administration's FY86 budget request to DOE and with a copy of the Department's subsequent request to the Office of Management and Budget?

Answer: Both budget requests are enclosed as requested.

(Committee Note.--Enclosures retained in Committee files.)

## QUESTIONS FROM THE MAJORITY

## CLEAN COAL TECHNOLOGIES

Question 11: The FY 1985 Appropriation for Fossil Energy R&D included language directing the DOE to put out a solicitation for technologies and projects which had the potential to allow us to utilize coal with less pollution. The DOE did issue that solicitation. Could you give us some idea of the magnitude of the response to that solicitation and the nature of the responses?

The same Appropriation set up an account in the Treasury to fund research in this area. While there are no funds in this account at this time, the Administration did not request any. Once the DOE has reviewed the results of its solicitation, how do you intend to proceed?

Answer a: As of March 6, 1985, Fossil Energy has received 177 submissions in response to its solicitation on clean coal technologies. Of this total, 16 submissions were just letters of support and general interest. The remaining 161 informational proposals are currently being reviewed.

b: At least one or more submissions has been received in each of the following technology categories:

- Flue Gas Cleanup
- Advanced Combustion Processes
- Fluidized-Bed Combustion
- Coal Preparation
- Alternate Fuels
- Hot Gas Cleanup
- Surface Coal Gasification
- Fuel Cells
- Heat Engines
- Magnetohydrodynamics

- Coal Liquefaction
- Underground Coal Gasification

After the submissions have been analyzed, the Department will report to Congress by May 1, 1985 on the potential usefulness of each emerging clean coal technology and the extent to which Federal incentives will accelerate the commercial availability of those technologies, as directed by Congress. No further action in regard to the submissions is planned at this time.

## QUESTIONS FROM THE MAJORITY

### FUSION - ARE WE DOING "SCIENCE" OR "ENERGY?"

Question 12: The Congress did not fund the full request for Fusion R&D in the FY 85 Budget. The Administration has requested $50 million less for FY 86 than it was given in FY 85 (request of $390 million). Throughout the budget document there is an emphasis on Fusion being more oriented toward "science." Does the Department believe that a $390 million science program is justified in plasma physics? That is almost one-third of the entire NSF Budget. Why aren't we focusing on those aspects of the program that will eventually make Fusion a commercial means of producing electricity? Why aren't we focusing on materials research and novel reactor concepts?

Answer: The Department of Energy's Magnetic Fusion Energy program is *not* a $390 million program of basic plasma physics research. However, it is essential to do excellent scientific research in this discipline in order to make effective progress in developing the scientific and technological basis for fusion. To that end, the program *is* focused on those problems that need to be solved. This requires a balanced program that concentrates on the means to create, confine, and heat a plasma to conditions where sustained controlled thermonuclear fusion reactions can occur. This is an essential first step in the process of reaching the goal of realizing a practical fusion energy system. In addition, there is the need to have suitable materials, that will work in the fusion environment. To that end we support certain materials studies that are critical to the next steps in fusion research. In fact, the materials effort is up by about 6% in the FY 86 request.

## QUESTIONS FROM THE MAJORITY
## NUCLEAR WASTE ARE WE MOVING FORWARD?

QUESTION 13(a): The Budget request for the high-level nuclear waste program is up substantially. (FY 85-$327.7 million vs FY 86-$571.5 million). I believe the DOE feels that the Waste Fund will cover those costs. Could you tell us what assumptions must hold up for that to be true?

ANSWER: As you may be aware, the Department's contracts with nuclear utilities provide for payment of a one-time fee for fuel used to produce electricity prior to April 7, 1983. Under the contracts, utilities have 3 payment options for this fee; (1) payment over the 40 quarters prior to delivery with interest accruing from April 7, 1983, (2) lump sum payment upon acceptance by DOE of the fuel with interest from April 7, 1983, and (3) lump sum payment by June 30, 1985, without interest. The budget is based on the assumption that $770 million in one-time fees will be received by June 30, 1985. Under the contracts, utilities have until June 1985 to select from the three payment options. The Department has, on three different occasions, requested information from the utilities as to their intent in this regard. All of these reviews, including the most recent reviews conducted this past January, support our estimate that $770 million will be paid by June 1985.

## QUESTIONS FROM THE MAJORITY
## NUCLEAR WASTE-ARE WE MOVING FORWARD?

| | |
|---|---|
| QUESTION 13(b): | Given that you now have a number of lawsuits pending against you, do you believe you will be able to move forward as your budget request anticipates? Could you give us, for the record, a summary of tne litigation which is pending? |
| ANSWER: | Several different lawsuits have been filed recently concerning the Department's activities under the Nuclear Waste Policy Act of 1982. Although the potential for delay exists in the event of an adverse decision, the Department does not believe at this time that any of these suits will result in a substantial delay, or a need for any significant alteration in the program. We believe that we will be able to move forward as the FY 1986 budget proposes.<br>Attached is a summary of pending litigation. |

## SUMMARY OF PENDING LITIGATION

1. State of Nevada v. Department of Energy, Court of Appeals for the Ninth Circuit.
   Suit by the State of Nevada to require the Department to provide funding, under the State grant provisions of the Nuclear Waste Policy Act, for the State to conduct primary data gathering activities on the potentially acceptable site under consideration at Yucca Mountain, Nevada.

2. Environmental Policy Institute, et. al. v. Department of Energy, Court of Appeals for the Ninth Circuit.
   Suit by the Environmental Policy Institute and a number of other public interest and environmental groups to have the siting guidelines, issued in December 1984, reviewed.

3. State of Texas v. Department of Energy and Delbert Devin et. al. v. Department of Energy, Court of Appeals for the Fifth Circuit.
   The two suits have been joined. They seek to have the court review the potentially acceptable sites identified in Texas in February 1983.

4. Wisconsin Electric Power Company et. al. v. Hodel, Court of Appeals for the District of Columbia Circuit.
   Suit concerns the appropriate level of payment to be made into the Nuclear Waste Fund. Suit challenges inclusion of station use electricity in computing the ongoing fee. The Department prevailed in the District Court.

5. General Electric Uranium Management Corporation v. Department of Energy et. al., Court of Appeals for the District of Columbia Circuit.

This suit also concerns the appropriate level of payments to be made into the Nuclear Waste Fund. In this case, plaintiff challenges the four-tiered approach for assessing the one-time fee which results in a relatively greater charge against their low burnup fuel. The Department prevailed in the District Court.

On its own motion, the District Circuit Court has consolidated this case with the Wisconsin Electric case. Both cases have been briefed on appeal, but oral argument has not yet been scheduled.

## QUESTIONS FROM THE MAJORITY

### MORATORIUM

Question 14: The Department of Energy budget justifications propose an unspecified moratorium on further development of the Strategic Petroleum Reserve, yet your statement on page 4 speaks of a five-year moratorium.

(a) Do you, or is the Administration, proposing a 5-year moratorium on further Strategic Petroleum Reserve development and fill?

(b) If this is the case, the Administration's proposed deferrals of the Strategic Petroleum Reserve monies amount to rescissions, am I not correct?

Answer: (a) The proposed moratorium is indefinite. Present plans are that it is a one year moratorium to be maintained at least through fiscal year 1986. No final policy decisions have been made concerning future years even though future year Federal budget forecasts assume continuation of the moratorium through fiscal year 1990.

(b) The Acting General Counsel of the Department has prepared a memorandum of law which concludes that the proposed deferral of SPR Petroleum Account funds is correctly classified as a deferral rather than a rescission under the Impoundment Control Act.

## QUESTIONS FROM THE MAJORITY

### IMPORTS

Question 15: At the end of fiscal year 1985 there will be 489 million barrels of oil in the Strategic Petroleum Reserve.

(a) Therefore, what is your basis for stating that the Strategic Petroleum Reserve will provide 108 days of net oil imports?

(b) What were 1984 petroleum imports (crude, product, and total) and annual projections through 1990?

(c) What is the difference between "net" and "gross" petroleum imports as these terms are used by the Department?

Answer: (a) The Energy Information Administration Short-Term Energy Outlook (January 1985) projects that the average daily total net U.S. petroleum imports (excluding imports for the Strategic Petroleum Reserve) will be 4.5 million barrels per day for 1985. Based on that rate of imports, a Strategic Petroleum Reserve inventory of 489 million barrels would represent the equivalent of slightly over 108 days of net oil imports.

(b) The Energy Information Administration 1984 Annual Energy Outlook mid-price, mid-growth case projects the following levels of oil imports (million barrels per day) through 1990:

| | Calendar Year | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
| Net Crude Oil (excluding the Strategic Petroleum Reserve imports) | 3.0 | 3.1 | 4.0 | 4.3 | 4.5 | 4.8 | 4.9 |
| Net Petroleum Products Imports | 1.4 | 1.4 | 1.0 | 1.1 | 1.3 | 1.4 | 1.5 |
| Total Net Imports* (excluding the Strategic Petroleum Reserve imports) | 4.4 | 4.5 | 5.0 | 5.4 | 5.8 | 6.2 | 6.5 |

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* Totals may not add due to rounding.

(c) The difference between "net" and "gross" petroleum imports is the volume of crude oil and petroleum product exported. In calculating "days of protection" against loss of imports, the Strategic Petroleum Reserve imports are excluded from the net import numbers.

## QUESTIONS FROM THE MAJORITY

### DISTRIBUTION

Question 16: For several years there has been concern for our ability to distribute the Strategic Petroleum Reserve.

(a) What will be the maximum distribution capability to distribute the Strategic Petroleum Reserve oil if the proposed moratorium is agreed to by the Congress? Are we talking about 3.25 million barrels per day?

(b) The current distribution plan as approved by the Congress provides for 4.4 million barrels per day. What alternatives do we have for going higher than approximately 3.25 million, in addition to completion of Big Hill construction, and storage of some oil there also?

Answer: (a) The maximum initial distribution capability will be approximately 3.25 million barrels per day for a 489 million barrel inventory after planned distribution enhancements are complete.

(b) It is my understanding that since the 3.25 million barrels per day rate is the maximum site drawdown capability without further development of the Big Hill and Bayou Choctaw sites, we have no readily available opportunities for further significant increases in the distribution rate for the 489 million barrel inventory. To increase the drawdown capabilities of a major Strategic Petroleum Reserve site such as Bryan Mound or West Hackberry would involve installation of duplicate fresh water intake, on-site piping, electric power, and off-site pipeline systems requiring a substantial capital investment. The Department has done no design work on these types of alternatives.

## QUESTIONS FROM THE MAJORITY

## 550 MILLION-BARREL FILL

Question 17: If the Department were to complete leaching at Bryan Mound and West Hackberry through fiscal year 1986, the Strategic Petroleum Reserve would have a storage capacity of 550 million.

(a) How much money has been invested in Phase II?

(b) How much money has been invested in Phsse III?

(c) What would be the additional fiscal year 1986 obligations required, both total and on a per barrel basis? I understand we are talking about $43 million, or 70 cents per barrel, compared to a Big Hill cost of $2.15 per barrel. And these funds have already been appropriated.

(d) What would be the additional cost of going from 550 million to 610 million, of completion of all capacity development except Big Hill? I understand that we are talking about $130 million, or $1.07 per barrel. And all of these funds also have been appropriated. Would you comment?

Answer: (a) Phase II obligations through fiscal year 1984 totalled $651.7 million.

(b) Phase III obligations through fiscal year 1984 totalled $204.5 million.

(c) Continued solution mining at West Hackberry and Bryan Mound through fiscal year 1986 would require an estimated $43 million in obligations during the fiscal year 1985-fiscal year 1986 period, over the obligations provided for in the Administration's fiscal year 1986 request. As a 61 million-barrel increment over 489 million barrels, this would equate to an average of approximately $.70 per barrel, exclusive of oil purchase and transportation costs.

Full development from 489 million barrels to 750 million barrels would cost an estimated $561 million through fiscal year 1990, over the forecasts in the President's budget. For 261 million barrels in added capacity, this amounts to an average of $2.15 per barrel exclusive of oil purchase and transportation. Within these amounts an estimated $431 million or $3.08 per barrel would be associated with decisions to develop Big Hill in addition to 610 million barrels in capacity at other sites. The following table presents the unit costs for each of these storage increments, exclusive of oil purchase costs:

| Storage Increment (Million Barrels) | Average Cost per Barrel |
|---|---|
| 489-550 | $ .70 |
| 550-610 | $1.45 |
| 489-610 | $1.08 |
| 610-750 | $3.08 |
| 489-750 | $2.15 |

The full $43 million required to develop the 489 million-barrel to 550 million-barrel increment has been appropriated.

(d) We estimate the cost of developing a 610 million-barrel system to be $130 million over the projections in the President's budget. This amounts to $1.07 per barrel for an incremental 121 million barrels. Included within this estimate is the $43 million cost of proceeding to 550 million barrels as referred to above, thus the marginal cost for the 60 million-barrel increment from 550 milion barrels to 610 million barrels would be approximately $1.45 per barrel, exclusive of oil purchse and transportation costs.

At the end of fiscal year 1986, we expect to have $96 million in unobligated balances in the on-budget Strategic Petroleum Reserve account. Thus the full $130 million in question has not been appropriated.

## QUESTIONS FROM THE MAJORITY

## BIG HILL INVESTMENT

| | |
|---|---|
| Question 18: | How much money has been invested in Big Hill? |
| Answer: | Obligations for Big Hill through the end of calendar year 1984 totaled $148.5 million. |

## QUESTIONS FROM THE MAJORITY

## MORATORIUM ACTIONS

Question 19: What actions have been taken to implement the proposed moratorium?

Answer: The following actions have been or will be taken to implement the proposed moratorium:

- No funds will be obligated for oil acquisition beyond that required to achieve the 489 million-barrel storage level.
- Phase II leaching at West Hackberry will be discontinued at the end of fiscal year 1985.
- The Phase II cavern at Bayou Choctaw will not be filled.
- Phase III surface construction at Bryan Mound and West Hackberry will be completed.
- Phase III leaching at West Hackberry and Bayou Choctaw will not be started as previously planned.
- Work currently under contract at Big Hill will be completed. No new major construction will be awarded, and three major Big Hill procurements in process in early fiscal year 1985 were cancelled. Acquisition of crude oil pipeline right-of-way will be completed.
- Distribution enhancements relative to Lake Charles/West Hackberry pipeline and the connection from Big Hill to Texas Oil and Chemical terminal will not be initiated.

## QUESTIONS FROM THE MAJORITY

## STORAGE CAPACITY DEVELOPMENT

Question 20: Exclusive of any oil-fill decisions, what are the various increments for storage capacity development, and their incremental total and unit costs?

Answer: The following table presents the estimated total and average per barrel costs for various increments of Strategic Petroleum Reserve storage exclusive of oil purchase costs.

| Storage Increment (million barrel) | Total Costs (Millions) | Average Cost Per Barrel |
|---|---|---|
| 489 - 550 | $ 43 | $ .70 |
| 550 - 610 | $ 87 | $1.45 |
| 489 - 610 | $130 | $1.07 |
| 610 - 750 | $431 | $3.08 |
| 489 - 750 | $561 | $2.15 |

## QUESTIONS FROM THE MAJORITY

## INCREMENTAL PRICING

Question 21: During your confirmation process you stated that you believed that incremental pricing provisions of the Natural Gas Policy Act should be repealed as a part of a comprehensive natural gas proposal.

(a) Does the Administration anticipate submission to the Congress of either a comprehensive natural gas proposal or legislation repealing incremental pricing provisions of the NGPA?

(b) When do you expect to make such a decision?

Answer: Yes, the Administration contemplates submission of a comprehensive natural gas bill, including provisions to repeal incremental pricing. We continue to monitor the gas market carefully to analyze the impacts of partial wellhead deregulation on January 1, 1985. When we will submit legislation is not yet decided. We will probably make our decision in the next six months.

Prepared by: Jim White, GC-32
Office Phone: 252-6667
Home Phone: (202) 333-0590
Date: March 7, 1985
General Counsel Initials:
Coordinated with: Jim McAvoy

## QUESTIONS FROM THE MAJORITY

## EXTENSION OF EPCA

Question 22: Last Congress I was working with the Department toward upgrading the United States' capability to respond domestically to an international energy supply disruption. That legislation amended EPCA to provide for use of the Executive Manpower Reserve and voluntary agreements in certain critical situations. In addition, the Administration sought authority to conduct test sales from the Strategic Petroleum Reserve.

(a) Does the Administration support extension of EPCA, and do you intend to submit legislation to that effect?

Answer: The Department is currently conducting a review of all the expiring authorities of the Energy Policy and Conservation Act (EPCA). We are looking at a number of options and will complete our review as soon as possible.

(b) Will that legislation deal with other than a simple extension of EPCA?

Answer: As part of our review of the EPCA, we are studying options with respect to the contents of any proposed legislation, including a simple extension of the EPCA.

(c) When do you expect to make such a decision?

Answer: The Administration will advise the Congress of its position as soon as possible.

## QUESTIONS FROM THE MAJORITY

## URANIUM ENRICHMENT

Question 23: A major initiative in the Administration's budget is in the area of Uranium Enrichment, where it is proposed to return to the Treasury $200 million in FY 1986 and $300 million in fiscal years 1987 and 1988. Yet the Department's Budget justifications do not contain any details on how this is to be accomplished. Moreover, staff are informed that we may not see the details until May.

Question 23 (a) When can we expect to see the details? And are these estimates realistic?

Answer 23 (a) The Administration's budget as formally submitted to Congress introduces the concept that the uranium enrichment program will begin making payments to the Treasury in FY 1986 for past Government investment. However, the budget does not specify amounts and timing of repayment.

The details of the repayment proposal are currently being developed as a part of the comprehensive uranium enrichment business plan scheduled to be completed in May 1985. We believe that, with selection of an advanced technology, associated production decisions regarding the gas centrifuge enrichment plant and the gaseous diffusion plant operations, and the development of a business plan, the enrichment program can be made financially sound enough to generate positive cash flows in the future. We will provide details on a specific repayment schedule in May 1985.

## QUESTIONS FROM THE MAJORITY

## URANIUM ENRICHMENT

Question 23 (b) The DOE budget justification proposed that OMB and the Secretary be authorized to transfer revenues to the General Fund. What are the details?

Answer 23 (b) This language would permit the transfer of uranium enrichment revenues to the General Fund of the Treasury up to amounts identified for repayment in FY 1986. The balance of the uranium enrichment revenues will be used as a credit to the enrichment account.

## QUESTIONS FROM THE MAJORITY

## URANIUM ENRICHMENT

Question 24: The Administration's budget does not specifically propose closing GCEP. However, Committee staff have been informed by DOE program staff that a $200 million repayment would entail stopping all R&D, and closing one GDP in 1986?

Question 24 (a) Is this evaluation correct?

Answer 24 (a) A $200 million repayment in 1986 would require a $200 million reduction in the enrichment program. Reductions are not feasible in the gaseous diffusion budget as the power levels are already at a minimum. Furthermore, a gaseous diffusion plant shutdown does not yield any savings in the first year as termination costs about equal to 1 year's operating costs. Any reduction for payback would have to be taken from the R&D and GCEP accounts. The optimum distribution of any payback would be dependent on the May 1985 technology selection and business plan.

## QUESTIONS FROM THE MAJORITY

## URANIUM ENRICHMENT

Question 24 (b) Similarly, Committee staff have been informed that FY 1987 and FY 1988 savings of $300 million would entail stopping procurement of Set III machines for GCEP in that year and operating only one-half of one building at GCEP, although it is anticipated that at least two buildings will be operating.

Which is the case, do you anticipate operating two buildings, in which case the estimates of savings are inflated, or do you anticipate the programmatic changes that I just outlined?

Answer 24 (b) Repayment amounts of $300 million in FY 1987 and FY 1988 would require program reductions in the gas centrifuge enrichment plant, the gaseous diffusion plant, and research and development accounts. The majority of these reductions would have to come from capital accounts as revenues are not projected to increase significantly above the FY 1986 level until FY 1989 and beyond. In the case of GCEP, a $300 million payback would effectively eliminate funding for the project. As a result, there would be no additional procurement of centrifuge machines and operation of even 1/2 building of the gas centrifuge enrichment plant might be eliminated. If either the atomic vapor laser isotope separation or the advanced gas centrifuge is the selected technology, repayment of $300 million would allow for some funds to conduct research and development only if one of the gaseous diffusion plants is closed in FY 1986.

## QUESTIONS FROM THE MAJORITY

## ADEQUACY OF FUTURE ELECTRIC GENERATING CAPACITY

Question 25: (Issue) While it is apparent that the U.S. economy is becoming less energy intensive, the substitution of electricity for other fuels is making us more electricity intensive. Yet, with the current hiatus in nuclear power plant orders, coupled with the prospects for increased acid-rain controls on future coal-fired plants, it seems doubtful that the electrical supplies will be able to meet the future demands, unless the Federal government plays a strong leadership role to help overcome the technical, regulatory, and financial obstacles to growth in the electric industry.

What do you feel would be an appropriate role for DOE to play in assuring the future growth of the electrical energy industry, especially with respect to the degree to which nuclear and coal-fired plants will be able to contribute to the overall growth, in light of the environmental, regulatory, and economic troubles associated with these technologies as they currently exist?

Answer: Many of the concerns about future electricity supply result directly from Federal regulation. This is particularly true in the case of nuclear licensing and environmental standards, as well as economic regulation. In these areas, the Department of Energy will continue its efforts to assure that regulations are developed and implemented in a manner that strikes a responsible balance between safety, protection of the environment, economic efficiency and national security.

QUESTIONS FROM THE MAJORITY

STUDY OF ELECTRIC UTILITY INDUSTRY

Question 26: (Issue) Several prestigious groups, including the Atomic Industrial Forum, the Edison Electric Institute (EEI), and the National Association of Regulatory Utility Commissioners, have called for formation of a presidential-level commission to study the problems facing our utility industry -- and the nuclear portion of that industry in particular -- to recommend policies to assure adequate supplies of electricity in the years ahead, and to identify reforms needed to remove the obstacles to further nuclear power development. The recently released EEI report recommended that this Commission study the changes needed to revive the nuclear option, including methods to:

1. enhance both the reality and the perception of safety of nuclear power
2. reduce constant-dollar construction costs
3. improve construction quality, and
4. eliminate needless risks that a new nuclear unit will be unable to operate.

Would you support the formation of a presidential-level commission to study problems currently facing our utility industry -- especially with respect to its ability to cope with future demand growth? To what extent could the Department contribute to such a study? To what extent will DOE be prepared to implement the recommendations of such a study?

Answer: The press of budget related issues in my short tenure as Secretary of Energy has kept me from coming to a decision on the desirability of such a commission.

It is vitally important to the strength of our economy and its ability to grow that electricity supplies be adequate and electric costs are reasonable. The growth in electricity demand over the past six quarters gives direct evidence of the continuing relationship between electricity and the economy. I am also aware of the widespread concern about the industry's willingness and ability to make the major capital investments that will be necessary in the future to assure continued adequacy of electricity supply in the long term.

Whether a Presidential Commission is the best means to foster a political consensus about how we should deal with these issues is a difficult question. I will need more insight into the thinking of the organizations which have proposed the Commission approach before making a decision on whether to support it.

## QUESTIONS FROM THE MAJORITY

## ELECTRIC ENERGY IMPORTS FROM CANADA

Question 27: (Issue) Canada, at one time, marketed its surplus electrical energy to the U.S. on an interruptible, short-term basis. Now, Canada's electricity is available to the U.S. -- and particularly to the New England states -- under firm, long-term contracts. In fact, by 1990, the New England Power Pool will be buying 10% or more of its power from Canadian sources, some of which are nuclear plants located in New Brunswick, Canada. The U.S. nuclear industry is understandably bitter. Carl Walske, President of Atomic Industrial Forum, states, "We've expressed regret that it seems possible to build nuclear plants in New Brunswick, instead of the U.S., to supply New England.

Question 27(a): Does the Department see a potential threat to U.S. energy security by our increased reliance on imported electric energy?

Answer: The U.S. has a clear commitment to international trade unencumbered by government controls, restrictions, or threats of controls and restrictions. That commitment extends, of course, to Canada and to imports of electricity.

Increased reliance on imported electric energy could potentially threaten U.S. energy security if such reliance results from an inability to provide electric supply domestically. In the short term, imports should not present a security threat, as Canada is a reliable supplier and only exports electricity which is officially certified as surplus to its needs. Indeed, imports can enhance security by allowing oil-dependent utilities to diversify their supply sources.

Over the long term, however, an inability to build domestic electric supply could cause reliance on imports to threaten security in at least two ways. First, such an inability could allow Canadian utilities to price their exports substantially in excess of their costs, perhaps as high as the cost of producing electricity from oil. Second, since Canadian supply surpluses are expected to diminish over time with growth in the Canadian economy, an inability to build domestically could leave us with insufficient supply when current import contracts expire.

## QUESTIONS FROM THE MAJORITY

## ELECTRIC ENERGY IMPORTS FROM CANADA

Question 27(b): What can the Department do to discourage increased imports of foreign electric energy, and to encourage more inter-regional sharing of domestic electric supplies?

Answer: Imports are saving consumers substantial sums of money by allowing utilities to displace the use of more costly oil and natural gas. The Department can promote economic domestic alternatives by making state regulators and the general public aware of the need for new electric power supply and by fostering conditions which allow such power supply to be profitably financed. Such conditions would include rate regulation which allows utilities to earn a market rate of return on investments, less burdensome environmental regulations, and a streamlined nuclear power plant licensing process. The Department has promoted inter-regional sharing of supply by asking the North American Electric Reliability Council to review opportunities for Midwestern utilities to transmit more power to the Northeast and by actively supporting expansion of the Pacific Northwest-Southwest intertie.

## QUESTIONS FROM THE MAJORITY

## REACTOR DEMONSTRATION PROJECTS

Question 28: In the ERAB final draft report on Light Water R&D, the panel states that "Should it become desirable to commercialize an innovative design, then DOE should participate with the private sector in an appropriate prototype or demonstration plant." To what extent would the Department be willing to commit its resources towards the construction and operation of prototypes of the advanced reactor design concepts?

Answer 28: Over the next several years, conceptual designs will be developed for advanced reactors that focus research and development activities. These designs will be accompanied by marketing studies, improvements in licensing procedures, cost estimate development, and economic studies. If we are successful in developing one or more concepts which have strong market appeal and which promise to be competitive with alternative energy resources, the private sector would take the lead in developing proposals for construction of a prototype plant. Such proposals would, of necessity, need to address financial and institutional aspects involved in the prototype construction. Any proposal calling for Government support would be evaluated in light of conditions prevailing at the time, including the potential of the concept to significantly contribute to our energy needs, its overall economics, our overall resource position and basic energy policy.

## QUESTIONS FROM THE MAJORITY

## REACTOR DEMONSTRATION PROJECTS

Question 29: In view of the recent reductions in NRC's safety research budget, and given the expertise and resources that currently exist within the DOE laboratories, do you agree that it is not only appropriate, but also imperative, that DOE expand its reactor safety research capabilities, especially in the area of source-term research, results could significantly affect NRC regulations in areas of safety and emergency evacuation requirements?

Answer: Completion of existing and planned safety research on source terms at the Nuclear Regulatory Commission, the Department of Energy, and within the industry is appropriate and important. This R&D forms the industry's basis for some of the Industry Degraded Core results and conclusions reached by the American Nuclear and American Physical Societies. It will also be central in decisions on source terms that the Nuclear Regulatory Commission is soon to make. The Department is reviewing the studies mentioned above and is following the Nuclear Regulatory Commission deliberations to determine if additional new research is also required. We plan to continue participation in the LWR Aerosol Containment Experiments Source Term Experiment programs as well as executing the fission product transport and deposition test in the Loss of Fluid Test (LOFT) facility.

## QUESTIONS FROM THE MAJORITY

## REACTOR DEMONSTRATION PROJECTS

Question 30: With the cancellation of the Clinch River, how does the Department intend to use its breeder reactor development resources to their best potential, so as to retain an adequate focus, and to retain a cadre of experts that will be able to move the program forward logically and with sufficient substance to maintain Congressional support and attract international interest?

Answer 30: The restructured civilian reactor program will continue to sponsor programs at the cutting edge of technology. Careful attention has been paid to maintain much of the expertise at our national laboratories, industrial entities, and universities within the limits of current funding constraints. This base program has provided the focus for the innovative design concepts that can lead to an advanced generation of passively safe, economic Liquid Metal Reactor facilities. We intend to continue to utilize the base technology program to implement the R&D needs of the innovative design concepts and utilize the cadre of experts developed through the breeder program. Further, we have embarked on a concerted effort for expanded international collaboration. In this regard we are actively pursuing foreign utilization of our unique facilities and also joint programs wherein the work is divided and the results shared by the participating parties. We will continue advanced

Answer: (continued)

breeder reactor technology, especially in fuels and materials (e.g., three-year core for the Fast Flux Test Facility), and seek to benefit from plant operating experience which will be gained overseas first.

## QUESTIONS FROM THE MAJORITY

## INTERNATIONAL COOPERATION

Question 31: Considering the Administration's increased emphasis on the pursuit of international collaboration in a variety of research areas -- including breeder, fusion and high energy physics programs:

a. Has the Department taken a close look at the impact that such collaboration would have on nuclear non-proliferation goals?

Answer: The Department undertakes international collaboration in non-nuclear as well as nuclear areas. The former includes areas such as high energy physics, clean use of coal and basic research related to environmental and health-related effects of new energy sources. Our nuclear collaboration includes areas such as the breeder and nuclear waste management. We are primarily working towards collaboration in the nuclear area with the advanced Western countries (including Japan), and can assure you that the Department pursues only those collaborative activities which are not only in complete conformance but also support our non-proliferation goals.

b. Has the Department looked into all aspects of international collaboration so as to identify potential roadblocks to the sharing of people and equipment in such schemes? Will the Department be making any recommendations as to what changes might be needed in international law in order that international collaborative projects can be pursued more easily?

Answer: The Department is looking into potential roadblocks to greater international collaboration as part of the Economic Summit Process, in particular under the Working Group on Technology, Growth and Employment established after the 1982 Versailles Summit. The International Energy Agency is also investigating some of these issues, particularly in research and development areas which are not covered by the Summit Working Group. We have identified some impediments, such as multiple entry visas, spousal work permits, varying practices and policies regarding custom duties on imported equipment, controls on the export of technology and information dissemination practices to name the more prominent ones. We are in the process of examining these issues to determine what administrative remedies could and should be taken. It is not now evident that any recommendations for changes in U.S. or international law will be be necessary. We are in the process of examining these issues both nationally and internationally and are coordinating with the relevant program offices and the Department of State. In addition, we are discussing these issues within the International Energy Agency.

## QUESTIONS FROM THE MAJORITY

## DEFENSE NUCLEAR ENERGY PROGRAMS

| | |
|---|---|
| Question 32: | Besides the obvious responsibilities within the Office of Nuclear Energy for commercial reactor power development, fuel cycle, and uranium enrichment activities, are you aware of the key roles that this Office plays in the development of other, noncommercial applications of nuclear power? What importance would you place on these other functions? What funding levels has DOE committed to support these activities in FY 1986? Are those funding levels adequate to assure that these programs will proceed at a pace consistent with the NASA and/or DOD needs for such reactors? |
| Answer: | Yes, the Office of Nuclear Energy is actively involved in these nuclear efforts in support of both civilian and military applications, and the Department places great importance on these activities. These programs include efforts both in support of space applications such as the Strategic Defense Initiative and the National Aeronautics and Space Administration's scientific and planetary research programs as well as terrestrial defense applications for special purpose nuclear power systems. The Acting Assistant Secretary for Nuclear Energy has ensured that the Department's nuclear energy activities are closely integrated with the needs of the Department of Defense and the National Aeronautics and Space Administration organizations. Joint management and program review agreements are in place. |

Answer 32: (continued)

From a budgetary point of view, the FY 1986 programs are grouped into two main categories, Advanced Nuclear Systems and Defense Nuclear Energy Systems. The first category includes primarily isotope power systems and has a requested budget level of $20 million in FY 1986. The main focus of this effort during FY 1986 is in support of the NASA Galileo and Ulysses missions planned for launch in May/June 1986.

The second category deals with reactor power systems and has a requested budget level of $19.5 million in FY 1986. The requested funding will focus on the ground test of the SP-100 space reactor in support of future military and civilian missions and on the development of a 15 kilowatt (electrical) terrestrial reactor as a promising alternative power system for the planned upgrade of the Distant Early Warning (DEW) line across Northern Canada. The requested funding levels are adequate to assure that these two efforts will proceed on a schedule consistent with National Aeronautics and Space Administration and Department of Defense needs. These programs are also funded in the budgets of those agencies.

## QUESTIONS FROM SENATOR McCLURE

## UNIVERSITY GRANTS

Question 33: On January 8, I wrote Secretary Hodel regarding Departmental policy regarding the vesting of fee title or any other property interest in an entity other than the United States and the specific criteria that DOE employs in the case of section 111 of the Energy Reorganization Act of 1974. Would you supply the Department's response for this record?

Answer: The response to your letter was sent to you on March 8, and a copy is attached.

Attachment

THE SECRETARY OF ENERGY
WASHINGTON D.C. 20585

March 8, 1985

Honorable James A. McClure
Chairman, Committee on Energy and
Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

This is in response to your letter of January 8, 1985, to Secretary Hodel regarding the policy of the Department of Energy (DOE) on the use of section 111(b) of the Energy Reorganization Act of 1974. We share your concern that the long term interests of the Federal Government in facilities constructed with Federal dollars be fully considered and appropriately protected, particularly during periods of budgetary constraint, when energy program operating funds are being curtailed. We assure you that the Department's funding of the Catholic and Columbia Universities' projects does not represent the normal practice of the Department in funding the construction of research facilities. Both of these projects result from congressional recommendations in the House of Representatives report, accompanying the FY 1984 Energy and Water Development Appropriation Act, H. Rep. No. 217, 98th Cong., 1st Sess. 89 (1983), which stated that funds were provided to initiate construction of research facilities on university land. It was determined that section 111(b) was the proper authority for the Department to effectuate that intent. In this regard, the Department's activities with respect to Columbia and Catholic Universities will not limit the Department's ability to judge future projects on their own merits in regard to vesting fee title to such facilities in other than the United States. Our report on the three questions raised in your letter follows:

- The general policy of DOE regarding the vesting of fee title or any other property interest in an entity other than the United States.

  It is the general policy of this Department to retain title to any improvements made with Government funds unless overriding programmatic or public benefits will result from vesting title in another party. It is also our policy to disclose our plans to construct or modify facilities at nongovernment installations in the project data sheets which accompany the Department's budget request. This provides prior notice to Congress and solicits agreements on improvements at nongovernment installations or at installations on nongovernment land, whether or not the Government retains title to those improvements. There are two exceptions to this policy; first, when the improvements are determined to be incidental to and necessary for an authorized project, we may not take title. Examples would be minor alterations necessary to accommodate an authorized project, such as electrical system modifications, utility extensions, or minor remodeling. Second, where construction of improvements is undertaken with Federal funds in grant and cooperative agreement programs for other than research, development, and demonstration purposes, the general policy of the Department is to vest title in the recipient in accordance with Office of Management and Budget Circulars A-102 and A-110.

- The specific criteria that DOE employs in the case of section 111 of the Energy Reorganization Act of 1974.

Our real estate directive requires special notification and approval for these types of facilities. However, there are no specific detailed criteria for application. Each situation is unique and must be judged on its individual merits. In making these judgments, we consider all pertinent factors, including:

(1) The principal purpose of the facility; i.e., will it serve a direct program need over an extended term, or is it a facility primarily for general public benefit.

(2) The nature of the improvements and their relation to other Government-owned improvements at that site.

(3) The potential benefits and liabilities of Government ownership.

(4) The advantages, both in terms of available scientific expertise and total facility costs, of construction at the proposed nongovernmental site.

- A list of similar research facilities under DOE consideration.

At present, there are two facilities similar to those at Catholic and Columbia Universities: a science facility at the University of Oregon and an energy conservation applied research laboratory at Northwestern University. These facilities were not included in the Department's FY 1985 budget request, but were the result of congressional recommendations. The Senate report accompanying the Energy and Water Development Appropriation Bill of 1985, recommends that the Department provide funds to the University of Oregon. The FY 1985 Continuing Resolution made available $16,000,000 for a grant for facilities to be located at Northwestern University. Copies of the language from the report and the law are enclosed for your information. Each facility is under programmatic review. If the facilities are funded for construction a decision will be made, based upon all factors, whether to vest title in the respective university. Appropriate notification would be provided to Congress.

We appreciate your interest and concern regarding the use of section 111(b). If you desire any additional information, please let us know.

A duplicate original of this letter has been sent to Senator Johnston.

Sincerely,

JOHN S. HERRINGTON

Enclosures

## QUESTIONS FROM THE MAJORITY

## POWER MARKETING

Question 34: During your confirmation hearing, you assured Senator Evans that you would not do anything adminstratively to implement the Office of Management and Budget Proposal for changing the repayment programs for the five Power Marketing Adminstrations. In fact you stated, "I would not do anything administratively in that area that I did not have the full advice and consent of this Committee ..."

We now have the President's budget which includes requirements for straight line amortization of debt and also a market rate of interest requirement for all outstanding debt.

Do you still stand by the statement you made during your confirmation?

Answer: Yes. In keeping with my previous statements, the President's budget proposes that the changes in the repayment practices of the power marketing administrations be implemented through legislation.

## QUESTIONS FROM THE MAJORITY

## AREAS SERVED BY THE POWER MARKETING ADMINISTRATIONS

Question 35: In regard to the Power Marketing Administrations, the OMB has proposed that current Treasury interest rates be applied to unamortized investment including irrigation assistance, that there be a fixed straight line repayment of the unamortized Federal investment, also including irrigation assistance.

Such a proposal would have a drastic impact on the area served by the Bonneville Power Administration and I think you can understand why Senator Evans, Senator Hatfield, and I are so concerned. But I think we also need to look beyond our own Pacific Northwest to other areas that are served by Power Marketing Administrations.

In how many states is federally generated hydropower marketed by the five Power Marketing Administrations? Would you supply for the record the names of those States?

Answer: The energy output of the five Power Marketing Administrations constitutes about 45 percent of the Nation's hydro production, or 6 percent of the Nation's electric power. The 33 States in which the five Power Marketing Administrations market federally generated hydropower are shown below. Also shown is the percentage of total power consumed in these States which is supplied by the Power Marketing Administrations.

| BPA | SEPA | APA | SWPA | WAPA |
|---|---|---|---|---|
| Oregon | Illinois | Alaska | Arkansas | California |
| Washington | Virginia | | Kansas | Arizona |
| Montana | N. Carolina | | Louisiana | Nevada |
| Idaho | S. Carolina | | Missouri | N. Dakota |
| Nevada | Georgia | | Oklahoma | S. Dakota |
| Wyoming | Florida | | Texas | Montana |
| | Alabama | | | Iowa |
| | Mississippi | | | Wyoming |
| | Tennessee | | | Minnesota |
| | Kentucky | | | New Mexico |
| | | | | Texas |
| | | | | Utah |
| | | | | Kansas |
| | | | | Nebraska |
| | | | | Colorado |

| BPA | SEPA | APA | SWPA | WAPA |
|---|---|---|---|---|
| 65% | 2% | 8% Anchorage<br>70% Juneau | 3-5% | 8-10% |

## QUESTIONS FROM THE MAJORITY

## POWER MARKETING

Question 36a: OMB would like to give the impression that the PMAs are not complying with the law in that they are supposed to recover operating and capital costs through power sales. This Committee held a hearing last fall to examine the Bonneville Power Administration's repayment situation, and I am satisfied that the requirements of the law are being met. Would you care to comment on the ability of the other PMAs to meet their repayment obligations?

Answer: Department of Energy policy requires the power marketing administrations to annually demonstrate their ability to meet their repayment obligations or to immediately prepare sufficient rate increases to do so, within the restrictions of their legally binding power sales and wheeling contracts. The other power marketing administrations have repeatedly raised their rates in recent years and are in compliance with their legal repayment obligations as shown by these studies. The following table shows the repayment status of the other power marketing administrations through 1984:

| PMA | Investment (in millions) | Amortization (in millions) | Percent |
|---|---|---|---|
| Alaska | $ 126 | $ 17 | 13% |
| Southeastern | 1,043 | 296 | 28% |
| Southwestern | 751 | 64 | 9% |
| Western | 3,957 | 1,527 | 39% |

The Administration does not base its case on the assertion that the power marketing administrations are violating the law. Rather the situation is that the laws governing repayment practices are unduly permissive. For example, the PMAs are permitted to slip their planned repayment obligations when meeting them is difficult due to the presence of unfavorable water conditions, greater than anticipated costs or payments required on other obligations established in law. Also, in some cases the interest rates for additions and replacements to existing projects were set at original project rates even though the addition or replacement occurred years later.

## QUESTIONS FROM THE MAJORITY

## POWER MARKETING

Question 36b: Are the repayment schedules designed to meet full cost recovery?

Answer: Under current repayment practices, the repayment schedules contain 50-year projections showing that the original power investment will be repaid with interest by the end of its service life. The Administration is proposing to modify these practices because: (1) in practice, actual repayment has not matched scheduled repayment, (2) current practices do not reflect the actual cost of refinancing the unpaid debt, and (3) current practices do not assure regular amortization of principal.

## QUESTIONS FROM THE MAJORITY

## POWER MARKETING

Question 37: OMB proposes to take old investment and charge current market rates on the unrepaid amount. Is this idea any different than say the Farmers Home Administration or the Veterans Administration suddenly jacking up the interest rates on home or business loans that may have been made during periods of lower interest rates?

Do you think that that idea may be lurking in the back of David Stockman's head?

Answer: I do not believe that the situations you mention are directly comparable. Power marketing administration interest rates on many original projects were administratively set below the contemporary Treasury cost of long-term money at the time the projects were built. The issue is not simply the fact that the current Treasury cost of financing power marketing administration loan assets has risen dramatically in subsequent years. In many instances the original project rates were lower than the prevailing Treasury cost of money. Also, in some instances, project additions and improvements were financed at or near original project interest rates--below Treasury's cost of money. Repayment of principal has been repeatedly deferred. Changing these practices seems only reasonable.

## QUESTIONS FROM THE MAJORITY

### EFFECT OF PRICE INCREASES ON FARMERS/IRRIGATORS

Question 38: There is no doubt that rate increases as proposed by the OMB would create tremendous difficulties for the aluminum smelting industry in the Pacific Northwest. This is well documented by a DOE study of OMB's proposal which I will have included in the appendix to this hearing record, but I am also concerned about the impact of the OMB proposal on an otherwise seemingly neglected class of consumer: Rural America, the farmer and irrigator.

Question 39: In all five power marketing areas, rural consumers are dependent to varying degrees on Federally generated power. Has the DOE done any studies on what the increase in rates as a result of the OMB proposal would do? Keep in mind that for many farmers, particularly irrigators, electric energy costs can be the difference between profit and a sheriff's sale.

Answer: The Power Marketing Administrations have conducted studies which indicate that wholesale rates might increase by 81% in the Bonneville Power Administration. The Office of Management and Budget has projected lower wholesale price increases of 49% or less for Bonneville. In the Western Area Power Administration, the overall increase projected is 32%. The increases faced by retail users, farmers, and other customers would be one-half or less of those estimated wholesale rate increases.

Regardless of which projections are closer to the mark, farmers and irrigators would no doubt pay higher electricity rates as a result of the Administration's proposal. However, the proposed reform would put the Power Marketing Administrations on a cost recovery, businesslike basis. This is part of an overall effort to bring Federal spending under control. That overall effort will help farmers and other productive sectors of the economy.

## QUESTIONS FROM THE MAJORITY

## POWER MARKETING

Question 40: The more I have read the DOE analysis of the OMB proposal, the more I am convinced that at best the proposal is foolhardy and does not reflect real world conditions.

Question 40a: Would you supply for the record what would happen to the power rates charged by each of the Power Marketing Administrations if the OMB proposal went through?

Answer 40a: Participants in the debate have produced estimates which vary widely. Projected wholesale rate impacts for FY 1986 as calculated by the Power Marketing Administrations would be:

| PMA | Projected Revenue Requirement Increase (millions of dollars) | Projected Percentage Rate Increase |
|---|---|---|
| Alaska | $ 10 | 126 |
| Bonneville | 599 | 81 |
| Southeastern | 86 | 78 |
| Southwestern | 74 | 82 |
| Western Area | 176 | 32 |
|  | $945 |  |

The Office of Management and Budget has done projections which find that wholesale rate increases would be substantially less than those projected by the Power Marketing Administrations. In the case of Bonneville Power, for example, OMB calculates that the maximum wholesale rate increase would be 49%. Whether rates would reach that level would depend on a number of factors, including the rate structure decided on by the Power Marketing Administration.

Percentage retail rate increases would be substantially lower than wholesale rate increases. Using the Bonneville case once again for purposes of illustration, OMB calculates a 49% wholesale rate increase would translate into a 26% retail rate increase — in the worst case situation where a customer is served by a utility which is totally dependent on Bonneville Power Administration for its power.

It is important to put these rate increases in an overall context. Under the worst case assumptions above, average rates in the Pacific Northwest would remain below the national average. They would move from 46% to 57% of prices which consumers pay on average nationwide.

Question 40b: How would the rates that the Federal government would be forced to charge compare with other sources of electric energy? Would there be some instances where Federal power would be non-competitive?

Answer 40b: According to the Western Area Power Administration's analysis, electricity representing 95% of federal investment would be marketable under the Administration's proposal. However, the remaining 5%, represented by electricity generated at three projects -- Collbran, Fryingpan - Arkansas, and Rio Grande -- may not be marketable under the Administration proposal.

The Alaska Power Administration finds that its power from the Eklutna project, representing about 45% of sales, would be marketable. Electricity from the Snettisham project (55% of sales) would be priced at a level roughly equal to or lower than competitive sources of power.

The Southwestern Power Administration believes the price of electricity would be higher than other sources in the near term in two states, Kansas and Louisiana, because of the combination of large wheeling charges and rate increases. The Southwestern

Power Administration believes it would lose some customers in these states, but much of the electricity would still be purchased on the expectation of lower comparative rates in the future. Customers in Kansas and Louisiana *in toto* represent 16% of Southwestern's load. Southwestern believes that electricity sales lost in these two states might be able to be sold in other states where wheeling charges would be lower or non-existent.

The Southeastern Power Administration believes that its power would still be marketable under the Administration's proposal.

The ability of the Bonneville Power Administration to repay debt to the Treasury will depend on how rate increases are allocated among customer classes.

Bonneville's February 4 analysis of the Administration's proposal allocates cost increases equally to all users, including the most price-sensitive, such as the aluminum industry, consistent with the Northwest Power Act.

The Bonneville Power Administration analysis finds that "up to 80 percent of the region's aluminum production facilities could go out of business." Bonneville projects that some customers would switch to other fuels, such as wood. Bonneville's study also assumed that it would lose 300 MW of load to cheaper power marketed by British Columbia Hydro. Under these assumptions, Bonneville Power Administration believes it would probably be unable to repay the Treasury in the short term.

In his testimony before the House Interior Committee's Subcommittee on Northwest Power on March 7, 1985, Office of Management and Budget Director David Stockman presented Office of Management and Budget's assessment of the effects of the Administration's proposal. Office of Management and Budget noted that a variety of options were possible. Under one option, Office of Management and Budget assumed that Bonneville Power Administration would offer the aluminum companies a rate sufficiently low as to keep them in business, a practice in which Bonneville Power Administration is engaging at present. Under this assumption, rates to other customers would rise less than in Bonneville's analysis, because these other customers would not need to pay for fixed costs not paid for by aluminum companies, and Bonneville Power Administration would be able to meet its Treasury obligations.

## QUESTIONS FROM THE MAJORITY

## POWER MARKETING

| | |
|---|---|
| Question 41: | The DOE analysis of the OMB proposal cites the possibility of a loss of customers to the BPA. What is the extent of those estimated losses and what would be the impact on repayment of debt to the Treasury? |
| Answer 41: | The ability of the Bonneville Power Administration to repay debt to the Treasury will depend on how rate increases are allocated among customer classes. |

Bonneville's February 4 analysis of the Administration's proposal allocates cost increases equally to all users, including the most price-sensitive, such as the aluminum industry, consistent with the Northwest Power Act.

The Bonneville Power Administration analysis finds that "up to 80 percent of the region's aluminum production facilities could go out of business." Bonneville projects that some customers would switch to other fuels, such as wood. Bonneville's study also assumed that it would lose 300 MW of load to cheaper power marketed by British Columbia Hydro. Under these assumptions, Bonneville Power Administration believes it would probably be unable to repay the Treasury in the short term.

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Question 41a: What about other revenues that go to the Treasury such as taxes?

Answer 41a: Tax payments to Treasury would be reduced to the extent that profitability of Pacific Northwest firms is impaired. Bonneville Power Administration calculates that the annual loss in federal tax receipts could reach $321 million under their assumptions. It should be noted that this figure is a maximum, and it is premised on the assumption that Bonneville Power Administration would raise electric power prices equally to all users, regardless of the effect on sales. As noted above, this is not a necessary assumption.

Question 41b: Are there similar circumstances in any of the other Power Marketing Administrations?

Answer 41b: According to the Western Area Power Administration's analysis, electricity representing 95% of federal investment would be marketable under the Administrations's proposal. However, the remaining 5%, represented by electricity generated at three projects -- Collbran, Fryingpan - Arkansas, and Rio Grande -- may not be marketable under the Administration proposal.

The Alaska Power Administration finds that its power from the Eklutna project, representing about 45% of sales, would be marketable. Electricity from the Snettisham project (55% of sales) would be priced at a level roughly equal to or lower than competitive sources of power.

The Southwestern Power Administration believes the price of electricity would be higher than other sources in the near term in two states, Kansas and Louisiana, because of the combination of large wheeling charges and rate increases. Customers in Kansas and Louisiana in toto represent 16% of Southwestern's load. The Southwestern Power Administration believes it would lose some customers in these states, but much of the electricity would still be purchased on the expectation of lower comparative rates in the future. Southwestern believes that electricity sales lost in these two states might be able to be sold in other states where wheeling charges would be lower or non-existent.

The Southeastern Power Administration believes that its power would still be marketable under the Administration's proposal.

## QUESTIONS FROM THE MAJORITY

## POWER MARKETING

Question 42: OMB insists in calling the PMAs businesses. It would seem to me that they ignore the fundamental difference between what I would consider business, that is an organization which provides a good or service for a profit, and a PMA which, like all government, should be a servant of the people. I recall from your confirmation hearing a statement on your part that "government is not in business to make money."

Would you care to elaborate on the comment in relation to what OMB proposes for the PMAs?

Answer: Repayment reform is not offered as a "money-maker". Charging interest rates that match the current cost of money to the Treasury and setting a fixed annual schedule for repayment of the Federal investment will result in full cost recovery--that is recapturing the cost of providing Federal power in the rates charged to those who use it. Also, the government is not in business to lose money. We need to constantly reassess government programs and make sure that they measure up to the needs of the day. At a time of large Federal budgets, it makes sense to be sure that businesslike government operations are paying their own way.

## QUESTIONS FROM THE MAJORITY

### STABILITY IN RATES

Question 43: During your confirmation hearing you stressed the need on the part of the business community for stability in electric rates. What would be the effect of having the kind of repayment structure proposed by OMB on a hydro based generation system? Would that hold true for all of the Power Marketing Administrations?

Answer 43: The Administration's proposal would result in an increase in rates in all the Power Marketing Administrations that market electricity produced at dams that were built with federal funds at low interest rates.

## QUESTIONS FROM THE MAJORITY

## DIFFERENCES BETWEEN PMA RATES AND OTHER RATES

Question 44: OMB, and I might add, some members of the Senate, like to point out the difference between the rates to consumers served by PMAs and those paid by consumers in other parts of the country. This is often cited as evidence of a Federal subsidy.

Question 44a: True, there are significant differences, but to what factors do you contribute those differences?

Answer 44a: These differences are generally due to the availability to the Power Marketing Administrations of inexpensive hydropower and to the existence of long-term federal financing at very low interest rates.

Question 44b: Are there utilities -- private or public -- which in fact have rates comparable to or less than rates paid by consumers in PMA service areas?

Answer 44b: See answer to question 45.

## QUESTIONS FROM THE MAJORITY

## PRICES CHARGED BY OTHER HYDRO-BASED UTILITIES

Question 45: The PMAs were created to distribute and market electric energy produced by hydroelectric projects.

a. Are there utilities in the country who also have all or a major portion of their generation capacity hydro-based?

b. What are the rates that those utilities charge for hydropower?

c. What interest rates are utilities allowed to use in establishing those rates?

Answer 45: a. Most large utilities that have large portions of their generating capacity hydro-based are in the Pacific Northwest, although there are a few elsewhere.

b. Retail electricity prices are based upon the costs of building and operating a utility's overall system, and hence customers don't have the option of buying hydro electricity _per_ _se_. The rates of private utilities in the Pacific Northwest such as Washington Water Power, Puget Sound Power and Light, Portland General Electric, and Pacific Power and Light on average are higher than the rates charged by public utilities in the region. However, the most expensive public utilities charge higher rates than the least-expensive investor-owned utilities.

c. Investor-owned utilities for the most part paid market-based interest rates for money borrowed to construct facilities they own themselves.

## QUESTIONS FROM THE MAJORITY

## PRIVATE UTILITIES THAT RECEIVE PMA POWER

Question 46: OMB also appears to believe that only public utilities or preference customers presently receive Federally generated power. Are there any private utilities that receive PMA distributed power?

What about private utilities which simply pass through Federally generated power to their consumers?

Answer 46: A few private utilities receive firm Power Marketing Administration power; several private utilities purchase significant amounts of non-firm or short-term Power Marketing Administration power. One of the features of the Pacific Northwest Power Act of 1980 was that residential and farm customers of private utilities would have access to the rate benefits of federal hydropower.

## QUESTIONS FROM THE MAJORITY

## STRATEGIC IMPLICATIONS OF OMB PROPOSAL

Question 47: I am sure that there are strategic implications to the potential loss of a significant part of our Nation's aluminum smelting capability as a result of the OMB proposal. Would you care to outline what the impact would be?

Answer 47: In addition to its industrial uses, aluminum is important to national defense. I understand that it is classified as an essential strategic metal, being one of four controlled materials in the U.S. Department of Commerce's Defense Materials System.* It is included in the Nation's Strategic Stockpile. Since the Northwest aluminum smelters account for about one-third of the Nation's total production capacity, closures forced by rate increases could well have a significant impact on those strategic considerations.

Repayment reform, I should emphasize, is only one factor among many that will impact the U.S. aluminum industry; the strong dollar, a mature market, and earlier rate increases are the other major factors which account for the situation the industry is faced with.

*Source: Energy in the Primary Aluminum Industry, U.S. Dept. of Commerce, Nov. 1984, p. 1.

## QUESTIONS FROM THE MAJORITY

## POWER MARKETING

Question 48: I recall that the Federal Government is in effect its own customer and that power distributed by PMAs goes for Federal uses such as military installations or government projects. Would the OMB proposal have the net effect of raising the rates for power used by the Federal Government which is actually paid by the taxpayer's money?

Answer: The proposal would have the net effect of raising the rates for power used by the Federal government, primarily in the Western states, where the power marketing administrations serve several Federal facilities such as Department of Defense bases and National Aeronautics and Space Administration and Department of Energy laboratories.

## QUESTIONS FROM SENATOR HATFIELD

### REPAYMENT FLEXIBILITY TO ACCOUNT FOR FLUCTUATION IN STREAMFLOW

Question 49: The five Power Marketing Administrations (PMA) are hydro-based and, thus, sensitive to fluctuation in streamflow -- placing the PMA's debt repayment on a straight-line amortization, as DOE proposes, leaves no flexibility to adjust for this streamflow sensitivity. What analyses has DOE done to determine the effects of payment rigidity on rates?

Answer: The FY 1986 budget proposal would require straight-line amortization of Power Marketing Administrations' repayments. To accomplish this proposal in light of the facts that costs can be higher than projected and that streamflow is variable, thereby resulting in lower sales in low water-years, the Power Marketing Administrations would need to set up contingency funds, as provided for in the statutory changes included in the FY 1986 budget.

## QUESTIONS FROM SENATOR HATFIELD

### REDUCTION IN BPA ENERGY CONSERVATION SPENDING

Question 50: In the case of the Bonneville Power Administration (BPA), the DOE's sharp cutback in borrowing authority will result in a nearly 50 percent reduction in energy conservation spending. The Administration's position is that energy conservation is a national resource. How does the Department justify the depletion of this resource in the Northwest?

Answer: The Administration believes that conservation is an important energy resource. However, the Federal government is not responsible for funding all conservation efforts, just as it is not responsible for funding all energy production efforts. Given budget constraints at the Federal level and the current surplus of inexpensive electricity in the Northwest, large Federal expenditures on conservation in the Northwest are not justified at present. The repayment reform proposed by the Administration should also result in increased energy conservation as consumers respond to the more realistic prices which would result from the proposal. BPA will continue to fund its residential weatherization program, although at a reduced level.

## QUESTIONS FROM SENATOR HATFIELD

## ENERGY AND CONSERVATION

Question 51: While DOE's Research and Development budget request for FY 86 approximates the FY 85 appropriation, the FY 86 request increases funding for weapons research, naval reactors and defense-oriented nuclear energy while it cuts research funds for general science and energy conservation, as well as research aimed at nuclear, fossil, solar and renewable energy resources. Should the Committee expect to see this trend continue, and, if so, what is DOE's projection for the future of energy conservation programs?

Answer: The question suggests that the Department of Energy's FY 1986 budget has funded increases to weapons research and development activities at the expense of civilian research and development. In fact, the budgets for defense and non-defense programs were developed independently and in response to quite different criteria. The Department conducts research and development on new weapons systems and Naval reactors in response to requirements of the Department of Defense.

The Department's contribution to the Strategic Defense Initiative is one example of our response to a Defense Department requirement.

Budgets for civilian research and development activities have been developed carefully to ensure that we are concentrating our resources on activities which are both essential to our energy goal of achieving an adequate supply of energy at reasonable costs and appropriate to the Federal government. This has meant heavy emphasis on only the most essential longer-term research and development while leaving commercial application to the private sector. The application of these criteria has resulted in budget reductions to some civilian programs and these decisions were reached quite irrespective of decisions on our budget for defense-related activities.

Regarding trends in conservation, if funds appropriated by Congress in FY 1985 for several large projects (e.g., Automotive Stirling, Northwestern Laboratory) which were not requested by the President are discounted, the total request for conservation research and development in FY 1986 is actually larger than the FY 1985 appropriation. We continue to view conservation as an important part of our mixed and balanced energy resource system. We anticipate that the conservation program will continue to receive the attention and resources necessary to provide an appropriate complement to private sector activities.

## QUESTIONS FROM SENATOR HATFIELD

## ENERGY AND CONSERVATION

Questions 52 and 53: DOE has announced the intent to phase-out Federal participation in State and Local assistance programs over a 5-year period. At the same time, however, the Department has stated that it will re-direct its efforts so as to encourage expanded state and local participation, in order to assure the achievement of program goals.

Given these DOE policies, how does the Department justify the proposed 20 percent per year cuts in funding for Energy Policy and Conservation Act grants and for the Energy Extension Service, two programs which have proven effective in facilitating the kind of state and local participation that DOE states it is seeking to encourage?

Answer: These two programs have totaled $34 million per year for several years. Divided among 50 States, seven territories, and the District of Columbia, this is not a great burden to ask each jurisdiction to pick up over a four-year period. Those States that are reaping the benefits ought to be willing to pay the cost.

Just as for the other State and Local assistance programs, the key to phase-out will lie in the Department's effectiveness in getting others to see the benefits in increasing their funding support. In turn, this will require an increased staff effort over the next several years, an effort we are prepared to make.

## QUESTIONS FROM SENATOR HATFIELD

### PETROLEUM OVERCHARGE RESTITUTION FUND

Question 54: How many separate court settlements, which require some type of disbursement of oil overcharge funds, were handed down since the committee's 1984 oversight hearings? Please provide a list and the decisions by the court as to where the funds are supposed to go.

Answer: Construing the question to seek court cases making funds available for restitution through either settlement or judgment entered by the court, there are the following cases:

1. United States v. Sutton -- judgment for about $210 million plus interest payable to the states on a pro rata basis. Sutton has appealed to the Temporary Emergency Court of Appeals and has filed for bankruptcy.

2. Southland v. DOE -- Southland has paid through settlement $748,000 for distribution by OHA under Subpart V.

3. McClure v. DOE -- McClure has agreed to make four payments over the next year totalling $38,000 to be distributed by OHA under Subpart V.

4. Juniper v. DOE -- agreed judgment for about $391,000, plus interest to be distributed by OHA pursuant to Subpart V.

5. Power Management v. DOE -- agreed judgment for $374,000 to be paid to DOE for distribution. Power Management, however, is in bankruptcy.

6. Able v. DOE -- agreed judgment for $240,000 to be distributed by OHA under Subpart V.

## QUESTIONS FROM SENATOR HATFIELD

### Energy Information Administration

Question 55: The Department proposes the elimination of the Financial Reporting System. This will require legislation.

When can we expect to receive that legislation?

Answer: A proposal to eliminate the Financial Reporting System will be included in the Office of Management and Budget's Omnibus Reports Reduction Act, which the Office of Management and Budget plans to propose to Congress this spring.

QUESTIONS FROM SENATOR HATFIELD

Energy Information Administration

Question 56: DOE concedes that the information which is obtained on the Financial Reporting form and published in the Performance Profiles of Major Energy Producers, while available from other sources, cannot be found in any one place.

Would you provide the committee with the number of current users of the Financial Reporting System, and with the criteria used to establish that its "relative usefulness" did not merit continuation?

Answer: The Financial Reporting System is used within the Department of Energy and by other United States agencies, as well as by the public. The last Performance Profiles of Major Energy Producers report (1984) with a full year's history had the following distribution:

| | | |
|---|---|---|
| **Free:** | Mail List | 508 |
| | Others | 1062 |
| | Subtotal | 1570 |
| **Sold:** | | 154 |
| | Total | 1724 |

Based on numbers sold, the Performance Profiles report was ranked number 26 out of 50 periodicals offered for sale. The criteria used to establish "relative usefulness" include duplication of data available from public sources, response burden imposed on industry, cost of conducting the survey, and the extent to which energy industry financial analysis can be conducted successfully using alternative sources of data. The Energy Information Administration concluded that the Financial Reporting System is excessively burdensome and duplicative of publicly available data, and that thorough and accurate analysis of financial issues affecting energy industries can be made through the use of publicly available financial data in conjunction with other Energy Information Administration data systems. In summary, the Energy Information Administration reached the conclusion that at a time when it is critical to control government spending, the costs of conducting this survey are disproportionate to its value.

QUESTIONS FROM SENATOR HATFIELD

Energy Information Administration

Question 57: This country's uranium industry is operating below capacity. Department of Energy and industry disagree significantly in projecting domestic requirements that would have to be met by imports over the next few years (20 percent vice 80 percent). Department of Energy is required under Nuclear Regulatory Commission authorizing legislation to conduct viability reviews annually through 1992. Yet, Department of Energy has requested no FY 1986 funding for the uranium industry viability assessment. As a result the mandated annual report for FY86 will be based on survey data collected and analyses completed in FY85.

Is this decision based solely on funding consideration, and what assurance can you give the Committee that the FY85 data base will be sufficient for an accurate FY86 assessment?

Answer: Funds were transferred in FY 1983, FY 1984, and FY 1985 to the Energy Information Administration from the Office of the Assistant Secretary for Nuclear Energy. These funds will enable the Energy Information Administration to produce uranium viability assessment reports as shown in the following schedule:

| Viability Assessment as of | To be Published in | Funding Status |
|---|---|---|
| Dec. 1983 | Dec. 1984 | Fully funded |
| Dec. 1984 | 1985 | Fully funded |
| Dec. 1985 | 1986 | Partially funded* |

*The report to be published in 1986 will contain analysis of domestic mining and milling, as well as exports and imports. It will not contain analysis of foreign milling and mining operations, but the Energy Information Administration will have just completed in 1985 a major analysis of foreign uranium operations which we believe will be sufficient for an accurate FY 1986 assessment. We believe these funds are adequate, but if the Department determines that more funding is required during FY 1986, we will shift resources from other lower-priority projects.

## QUESTIONS FROM SENATOR HATFIELD

### Energy Information Administration

Question 58: Wood and wood wastes account for most of the bioenergy used in the United States today. The Office of Technology Assessment estimates that biomass could supply over 20 percent of the country's energy needs by the end of the century. The solar collector industry is now a $700-million-dollar-a-year business with estimated tremendous growth potential.

In deciding to terminate the alternate fuels program, which consists of the Solar Collector Manufacturers Activity Report and a biennial report on wood energy consumption, what analyses did the Department conduct to assure that program termination would not curtail the future potential to tap these alternative energy sources?

Answer: In cancelling the two publications, the Energy Information Administration is not terminating data sources for alternate fuels and, in fact, continues to collect residential fuel wood data in its "Residential Energy Consumption Survey" and commercial data in its "Nonresidential Building Energy Consumption Survey," as well as utility wood fuel consumption data in its "Monthly Power Plant Report" data collection.

When we performed an analysis of user requirements for alternate fuels data in 1983, we did not find a significant amount of interest in this type of data, and most of the identified needs were being met with our current publications. Except for wood (2.5 quads in 1982), the other alternate fuels jointly contribute less than .2 quads (or .3 percent) of the energy supply. This is presumably due to the fact that they have not yet become economically competitive.

Finally, when we look at demand for these data, it just is not there. For example, during 1984, the National Energy Information Center reports that alternate fuels represented a very low percentage of written inquiries:

| | |
|---|---|
| Solar | 5% |
| Synthetic Fuels | 1% |
| Wind | 2% |
| Wood | 1% |

Further, the sales at the Government Printing Office and distribution through the National Energy Information Center of two publications that we have done in alternate fuels is very low, given the fact that these are the only statistical publications exclusively devoted to solar and wood energy.

| | Copies Distributed | | | | |
|---|---|---|---|---|---|
| Publication | Date | Free | Sales | Mail List | Total |
| Estimates of United States Wood Energy Consumption - 0341 | 8/82 | 1374 | 359 | 189 | 1922 |
| Estimates of United States Wood Energy Consumption - 0341(83) | 11/84 | 759 | 2 | 397 | 1158 |
| Solar Collector Manufacturing Activity - 0174(82) | 6/83 | 1188 | 233 | 520 | 1941 |
| Solar Collector Manufacturing Activity - 0174(83) | 6/84 | 1095 | 120 | 639 | 1854 |

(See attached for comparisons)

This ranks all the Energy Information Administration's periodicals by sales during calendar year 1984. Some annuals, biennials, and triennials were printed prior to calendar year 1984 and some late in that calendar year; no weighting adjustment was made. Information on free, Energy Information Administration and total distribution is also shown.

| Rank | Publication Title | Sales[1] | Free[2] | Mail L.[3] | Total |
|---|---|---|---|---|---|
| 1 | Monthly Energy Review | 2730 | 2037 | 2074 | 6841 |
| 2 | Annual Energy Outlook 1983 | 1393 | 2470 | 673 | 4536 |
| 3 | Annual Energy Review 1983 | 921 | 2050 | 537 | 3508 |
| 4 | Short-Term Energy Outlook | 833 | 1531 | 1427 | 3792 |
| 5 | Natural Gas Monthly | 738 | 527 | 764 | 2030 |
| 6 | Petroleum Supply Monthly | 682 | 724 | 948 | 2354 |
| 7 | Electric Power Monthly | 596 | 701 | 1280 | 2576 |
| 8 | Survey of Nuclear Power Plan Construction Costs 1983 | 564 | 1295 | 1742 | 3601 |
| 9 | Typical Electric Bills, January 1, 1983 | 515 | 231 | 0 | 746 |
| 10 | Weekly Petroleum Status Report | 495 | 1555 | 1973 | 4024 |
| 11 | Natural Gas Annual 1982 | 491 | 301 | 0 | 792 |
| 12 | Petroleum Supply Annual 1983 | 408 | 1470 | 325 | 2203 |
| 13 | Financial Statistics of Selected Electric Utilities 1983 | 381 | 1238 | 342 | 1961 |
| 14 | Quarterly Coal Report | 293 | 420 | 658 | 1371 |
| 15 | Petroleum Marketing Monthly | 288 | 680 | 706 | 1673 |
| 16 | Cost & Quality of Fuels for Electric Utility Plants 1983 | 280 | 826 | 349 | 1455 |
| 17 | Electric Power Quarterly | 267 | 640 | 891 | 1798 |
| 18 | State Energy Data Report 1960-82 | 254 | 1019 | 416 | 1689 |
| 19 | Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982 | 243 | 833 | 329 | 1405 |
| 20 | Inventory of Power Plants 1983 | 233 | 552 | 429 | 1214 |
| 21 | Electric Power Annual 1983 | 218 | 898 | 505 | 1621 |
| 22 | Weekly Coal Production | 208 | 408 | 454 | 1070 |

| Rank | Publication Title | [1] Sales | [2] Free | [3] Mail L. | Total |
|---|---|---|---|---|---|
| 23 | Coal Distribution | 180 | 711 | 715 | 1606 |
| 24 | Oil & Gas Field Code Master List 1983 | 164 | 329 | 1608 | 2101 |
| 25 | International Energy Prices 1979-83 | 157 | 310 | 368 | 835 |
| 26 | Performance Profiles of Major Energy Producers 1982 | 154 | 1062 | 508 | 1724 |
| 27 | U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves 1983 | 152 | 1642 | 3888 | 5682 |
| 28 | Cost and Indexes for Domestic Oil and Gas Field Equipment and Production Operations 1983 | 132 | 675 | 308 | 1115 |
| 29 | State Energy Data Report Supplement 1960-82 | 129 | 939 | 416 | 1484 |
| 30 | Solar Collector Manufacturing Activity 1983 | 120 | 1095 | 639 | 1854 |
| 31 | Annual Outlook for U.S. Coal 1984 | 113 | 753 | 852 | 1718 |
| 32 | Energy Conservation Indicators 1983 | 112 | 856 | 1802 | 2770 |
| 33 | State Energy Price & Expenditure Report 70-81 | 100 | 785 | 1790 | 2675 |
| 34 | Nonresidential Buildings Energy Consumption Survey: Consumption and Expenditures 1979 | 100 | 1037 | 579 | 1716 |
| 35 | Coal Data: A Reference 1982 | 100 | 202 | 0 | 302 |
| 36 | Coal Production 1983 | 81 | 554 | 392 | 1027 |
| 37 | State Energy Overview 1982 | 71 | 998 | 713 | 1782 |
| 38 | Residential Energy Consumption Survey: Housing Characteristics 1982 | 65 | 409 | 276 | 749 |
| 39 | Annual Prospects for World Coal Trade 1984 | 52 | 376 | 127 | 554 |
| 40 | Statistics of Interstate Natural Gas Pipeline Companies 1983 | 50 | 581 | 356 | 987 |
| 41 | Gas Supplies of Interstate Natural Gas Pipline Companies 1983 | 22 | 734 | 310 | 1066 |
| 42 | Residential Energy Consumption Survey: Consumption Patterns of Household Vehicles | 19 | 49 | 0 | 68 |
| 43 | Commercial Nuclear Power 1984 | 12 | 702 | 223 | 937 |

| Rank | Publication Title | Sales[1] | Free[2] | Mail L.[3] | Total |
|---|---|---|---|---|---|
| 44 | World Nuclear Fuel Cycly Requirements 1984 | 9 | 737 | 223 | 969 |
| 45 | International Energy Annual 1983 | 9 | 1681 | 466 | 2156 |
| 46 | Estimates of U.S. Wood Energy Consumption 1980-83 | 2 | 759 | 397 | 1158 |

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Next is a list of non sale Energy Information Administration publications distributed in 1984.

| | Publication Title | Free | Mail L. | Total |
|---|---|---|---|---|
| 1. | EIA Publication New Releases | 2207 | 11126 | 13333 |
| 2. | Energy Data Contacts Finder | 1553 | 8243 | 9796 |
| 3. | EIA Publications Directory | 3849 | 3994 | 7843 |
| 4. | Synopsis of the Annual Energy Review and Outlook 1983 | 3495 | 763 | 4248 |
| 5. | Annual Report to Congress 1983 | 3319 | 828 | 4147 |
| 6. | Energy Information Directory | 2546 | 1193 | 3739 |
| 7. | Directory of Energy Data Collection Forms | 2154 | 850 | 3004 |
| 8. | Survey of U.S. Uranium Marketing Activity 1983 | 1066 | 1854 | 2920 |
| 9. | U.S. Natural Gas at a Glance 1982 | 832 | 1991 | 2823 |
| 10. | Residential Energy Consumption Survey: Consumption & Expenditures April 1982-March 1983 | 924 | 397 | 1321 |
| 11. | Residential Energy Consumption and Expenditures by End Use for 1978, 1980, and 1981 | 889 | 398 | 1287 |
| 12. | Assessment of the Quality of Selected EIA Data Series (Coal & Electric Power Data, 77-82) | 929 | 238 | 1167 |
| 13. | Indexes and Estimates of Domestic Well Drilling Costs 1983 and 1984 | 701 | 282 | 983 |
| 14. | U.S. Electricity at a Glance 1982 | 883 | 0 | 883 |
| 15. | Survey of U.S. Uranium Exploration Activity 1983 | 476 | 127 | 603 |
| 16. | U.S. Coal at a Glance 1982 | 236 | 0 | 236 |

[1] Sales Distribution - Includes copies sold by the Government Printing Office and the National Energy Information Center (single unit sales and subscriptions).

[2] Free Distribution - Includes, when applicable, copies given to Energy Information Administration Program Offices, Government Printing Office Depository Libraries, Government Printing Office Files, Congress, Department of Energy Press Room, National Energy Information Center, Office of Scientific and Technical Information.

[3] Mail List Distribution - Copies distributed in accord with the Energy Information Administration Pricing and Distribution Policy, including Federal Libraries, survey respondents, public and academic libararies, press/media, State and local governments.

## QUESTIONS FROM SENATOR WEICKER

## ENERGY CONSERVATION

Question 59: DOE proposes a 5-year phase-out of Federal funding of State and local assistance programs. What assurance can DOE offer that the necessary State and local participation will be forthcoming so that program goals will be met?

Answer: The rationale is based on the Department's conclusion, borne out of the many years' experience with these programs, that there are many alternative ways to support State and Local assistance programs or, at least, those program activities that have proven, significant benefits. We intend to work extensively with States, local governments, private enterprise and other appropriate groups in developing these other ways to promote non-Federal support for energy efficiency programs. The Department has already begun several demonstration projects illustrating innovative financing mechanisms appropriate to some of the State and Local assistance programs target sectors.

The phase-down of these programs is proposed in the belief that, with the Federal government making a multiyear commitment to these activities and assisting in developing other sources of support, the States and the private sector will gradually increase their funding levels and their success in providing non-Federal support for the most beneficial programs.

## QUESTIONS FROM SENATOR WEICKER

## INSTITUTIONAL CONSERVATION PROGRAM

| | |
|---|---|
| Question 60: | What percentage of eligible schools and eligible hospitals received energy audits through DOE's institutional buildings program? What percent of these buildings have received funding for the "Energy Conservation Measures" phase of the program? |
| Answer: | Twenty percent of the eligible schools and 23 percent of the eligible hospitals have received energy audits. Twenty-six percent of these buildings have received funding for the Energy Conservation Measures phase of the program. |

QUESTIONS FROM SENATOR WEICKER

STATE AND LOCAL ASSISTANCE

Question 61: One of the stated goals of DOE's Weatherization Assistance Program is to "encourage the States to look closely at assisting more homes by spending less on each home." Please provide the analyses that persuaded the Department to recommend this approach.

Answer: In a 1984 evaluation study based on analysis of energy savings in weatherized homes, it was found that some kinds of weatherization measures are more cost-effective than others, depending on the circumstances. It is therefore conceivable that by closer targeting of installed measures to achieve maximum cost-effectiveness, less could be spent, on the average, per home, thus making it possible to weatherize a greater number.

There is a point, when weatherizing any home, where the marginal savings resulting from each incremental measure drop off. In order to make limited resources serve as many people and conserve as much energy as possible, the Department would encourage States and local subgrantees to concentrate their efforts on those measures which have the largest payback and not on those which only very marginally contribute to savings. This is a general statement. Particular application is dependent on a variety of immediate circumstances which a State's energy audit is designed to address.

## QUESTIONS FROM SENATOR WEICKER

## PETROLEUM OVERCHARGE RESTITUTION FUND

| | |
|---|---|
| Question 62: | In view of the unsuccessful legislative history of the proposal to use oil overcharge funds to offset appropriations for State and Local Assistance Programs, would the Administration support appropriations for these energy conservation programs in the event that this legislation again, does not pass in time? |
| Answer: | The FY 1986 budget request for the weatherization assistance program and the schools and hospitals grants program assumes enactment of this legislation. If the legislation were not enacted, the Department would not request appropriations for these programs. |

## QUESTIONS FROM SENATOR WEICKER

## PETROLEUM OVERCHARGE RESTITUTION FUND

Question 63: If the legislation passes in time and there are insufficient monies available in the overcharge fund to support the authorized amounts, will the Administration support appropriations from the General Treasury to meet the difference?

Answer: Yes.

## QUESTIONS FROM SENATOR WEICKER

### Energy Information Administration

Question 64: Characterizing the Heating Oil Grant Program as "burdensome" and "not useful in predicting spot shortages of heating oil," the Department proposes to eliminate the program.

Did DOE conduct analyses to determine whether the program might be adjusted, perhaps by helping the state to standardize reporting methodology, so that it could be useful in predicting spot shortages?

Answer: The program is not a program to identify spot shortages of product per se; it is a program to monitor market price changes on a more current basis than is possible using existing Energy Information Administration systems. However, the Energy Information Administration's Weekly Petroleum Status Report monitors primary stocks and inventories and can show developing problem areas well in advance of the State programs. These data are available to the Department on a company and geographic basis each week.

The Energy Information Administration engaged in extensive discussions with Congressional staff, association representatives and staff of individual State energy offices. Additionally, a workshop was conducted in Boston in mid-summer of 1984 to clearly define the issues, needs, and potential approaches to development of a consistent program. As a result of that effort, the Energy Information Administration established sample sizes, sampling methodology, reporting dates, data elements, and time schedules for the cooperative program.

Funds were allocated to individual States proportionate to sample sizes and workload for the 1984-1985 heating season (and will be again for the 1985-1986 program). These efforts were undertaken at Congressional direction.

We continue to believe we are able to adequately monitor problem areas through existing Department of Energy programs.

QUESTIONS FROM SENATOR WEICKER

Energy Information Administration

Question 65: The State Energy Data System (SEDS) and the State Energy Price and Expenditure Data System (SEPEDS, formerly EPEDS) contain state level energy consumption, price, and expenditure data. States have relied on Energy Information Administration data for, among other things, conservation program plans. The Department has stated that one of its goals is to encourage expanded state and local participation in energy conservation programs.

How does DOE justify the termination of SEDS and SEPEDS at the same time that the Department is purportedly re-directing its efforts to facilitate greater state and local participation in energy conservation programs?

Answer: The Energy Information Administration will continue to serve the needs of State and local governments through its primary energy data systems, which provide national and key State level data on energy supplies, prices, stocks and consumption. The State Energy Data System and the State Energy Price and Expenditure Data System are derivative efforts. They draw on data from many sources, together with some calculated estimates, to produce a useable energy series on a State-by-State basis. The data on which the State Energy Data System and the State Energy Price and Expenditure Data System are based are taken from the primary Energy Information Administration data systems.

In developing the FY86 budget request, the Energy Information Administration gave priority to maintaining its primary data systems. With these systems solidly in place, other organizations could themselves construct the derivative data contained in the State Energy Data System and the State Energy Price and Expenditure Data System. The procedures used to create

State-level estimates are now being documented, including year-by-year listings of data sources, and all assumptions utilized. This documentation will allow State and local governments, if they wish to do so, to produce on their own some or all of the Energy Information Administration's current State Energy Data System or State Energy Price and Expenditure Data System data.

## QUESTIONS FROM SENATOR WALLOP

## REPAYMENT REFORM PROPOSAL

Question 66: Secretary Herrington, the FY 1986 budget includes a proposal that would change the debt repayment schedule for the Power Marketing Agencies. This proposal would allow the unpaid balance of the principal for power and irrigation investments to be repaid by the Power Marketing Agency annually at a level not less than what would be required under a straight-line amortization schedule with annual interest payments made on the total unamortized at the current cost to the Treasury.

Would you please tell me which contracts under the authority of the Western Area Power Administration serving customers in the State of Wyoming would be affected by the proposed provision, as well as how much would the cost of power be raised over current rates to Wyoming customers?

Answer: Western Area Power Administration (Western) customers in the State of Wyoming are served from three Federal projects; the Pick-Sloan Missouri Basin Program, the Fryingpan-Arkansas Project, and the Colorado River Storage Project.

Under the proposed provision Western's revenue from sales in Wyoming would be expected to increase by 89.4 percent over that presently received. The increase by project would be: Pick-Sloan Missouri Basin Program (126.5 percent), Fryingpan-Arkansas (186.7 percent), Colorado River Storage Project (54.0 percent).

Western's firm power customers in Wyoming, by project are:

Pick-Sloan Missouri Basin Program

Municipalities:
Cody
Ft. Laramie
Guernsey
Lingle
Lusk
Pine Bluffs
Torrington
Wheatland

Cooperatives:
Tri-State Generation and Transmission Assn., Inc.
Rushmore Electric Power Coop.,Inc.
Willwood Light & Power Company

Federal Agencies:
Francis E. Warren AFB

Irrigation Districts:
Goshen
Midvale

Fryingpan-Arkansas Project

Municipalities:
Gillette

Cooperatives:
Tri-State Generation and Transmission Assn., Inc.
Rushmore Electric Power Coop.,Inc.

Colorado River Storage Project

Municipalities:
Cody
Ft. Larimie
Guernsey
Lingle
Lusk
Pine Bluffs
Torrington
Wheatland

Cooperatives:
Tri-State Generation and Transmission Assn., Inc.
Willwood Light & Power Company

QUESTIONS FROM SENATOR WALLOP

CLEAN COAL TECHNOLOGIES

Question 67: Mr. Secretary, the Western Research Institute in Laramie, Wyoming, presently has a cooperative agreement with the Department of Energy. Under this agreement, the Institute is pursuing research in oil shale, underground coal gasification, tar sands and asphalt.

a. While the FY 1986 budget specifically mentions the Institute for continued funding in oil shale research, funds for this program are also being reduced by three million dollars. How much of a reduction in funding will the Institute shoulder out of this amount?

b. Will the Institute see a reduction in its other areas of research, specifically underground coal gasification and tar sands? If so, how much?

c. Finally, the Institute's cooperative agreement expires in September 1986. Since many of the research projects are still in progress, and will most likely remain so after the September expiration date, does the Department plan on entering into negotiations to extend this agreement? If so, when? If not, why not?

Answers a&b: The United States Department of Energy is supporting research in oil shale technology, tar sands investigations, underground coal gasification development, and oil chemistry studies under the Cooperative Agreement with the Western Research Institute. The Agreement is effective from April 1, 1983, through September 30, 1986, valued at $26,702,200 and does not specify amounts to each technology area. Even though there are budget reductions in these technology areas, we plan to meet our obligations to the Western Research Institute. The Western Research Institute has not been asked to shoulder any reduction because of decreased budget requests. The Western Research Institute is, however, expected to acquire work for others and compete for the Department's projects.

c: The thrust of the program activities currently conducted by the Western Research Institute will probably continue; but, there are no plans at this time to extend the Cooperative Agreement. We have indicated a willingness to consider a no cost extension if the Western Research Institute's marketed research imposed an undue burden on meeting milestones established under the Annual Research Plans. In accordance with the spirit of the Competition in Contracting Act, part of the Deficit Reduction Act of 1984 (P.L. 98-369), plans are to compete follow-on research in the areas presently addressed by Western Research Institute under the Cooperative Agreement.

QUESTIONS FROM SENATOR WARNER

CEBAF

Question 68: Where does the Continuous Beam Accelerator Facility project stand on the list of priorities within the Department of Energy nuclear physics programs and within the national nuclear physics community?

Could you provide, for the record, the most recent cost estimates for CEBAF, and do you believe this amount to be a reliable estimate?

Answer: The Department of Energy Nuclear Physics program and the nuclear physics community both support the Continuous Electron Beam Accelerator Facility, CEBAF, as the highest priority for the next Nuclear Physics program construction project. Over the last decade, scientists within the basic nuclear research community have both informally and formally identified a scientific need for a high energy, continuous electron beam accelerator capability. The Department of Energy/National Science Foundation Nuclear Science Advisory Committee, NSAC, has carefully examined the scientific need for CEBAF and competing alternatives and has strongly recommended CEBAF construction. A subsequent review reaffirmed the need and priority for the CEBAF project.

The present total estimated cost of the CEBAF project is $201 million in FY 1986 dollars. Assuming construction would have started in FY 1986, the total estimated cost would be $225 million in escalated dollars. In addition, approximately $25 million in FY 1986 dollars will be required for research and development and architect/engineering activities in support of the construction project. These cost estimates have been reviewed by the Department's Nuclear Physics program, the Office of Energy Research Construction, Environment, and Safety Division, and by the Department's Independent Cost Estimating group and are believed to be reliable. In the Department's FY 1986 Nuclear Physics budget request, $5 million in operating expenses is requested to continue research and development and architect/engineering activities. The objective of FY 1986 work is to establish a technical base for this project so that construction could be initiated in FY 1987.

Prepared by: D. D. Mayhew
Office Phone No.: 353-3541
Home Phone No.: (301) 253-5619
Date: March 15, 1985
Assistant Secretary Initials: JFD for AWT
Coordinated with:

## QUESTIONS FROM SENATOR WARNER

## COAL IMPORTS STUDY

Question 69: The House Committee Report accompanying the FY 1985 continuing resolution directed the Secretary of Commerce, in consultation with the Secretary of Energy, to conduct a comprehensive study of the current and long-range impact of expanded coal marketing by foreign countries.

Is the Department of Energy participating in this study, and what is the status of the study?

With the consent of the Chairman, it is my intention for the Subcommittee on Energy and Mineral Resources to conduct a hearing on Coal Imports.

This proposed study could be a very useful part of that hearing.

Answer: The Department of Energy, in consultation with the Department of Commerce, is assisting in the preparation of this study. The Department is providing the technical analysis of the potential for coal imports. This analysis is identifying power plants which use coals of comparable quality to potential imports and assessing whether potential imports may be cost competitive, given recent domestic coal prices. The Departments of Energy and Commerce are jointly preparing the final report. It is anticipated that this report will be issued in the near future.

QUESTIONS FROM SENATOR WARNER

CLEAN COAL TECHNOLOGY

Question 70: Last year Congress passed a Clean Coal Technology program as part of the FY 1985 Continuing Resolution.

a. Can you give us some indication of the volume of inquiries DOE has received from the private sector on this program to date?

b. Could you comment on the range of technologies in which the private sector has expressed an interest? Has any interest been expressed in a coal-fired locomotive?

c. Could you give the Committee some indication of the resources which the Department is making available to review the relative merit of these clean coal technologies and report to Congress?

d. Do you anticipate DOE will report to Congress by May 1 as previously indicated?

Answer a: As of March 6, 1985, Fossil Energy has received 177 submissions in response to its solicitation on clean coal technologies. Of this total, 16 submissions were just letters of support and general interest. The remaining 161 informational proposals are currently being reviewed.

b: At least one or more submissions has been received in each of the following technology categories:

- Flue Gas Cleanup
- Advanced Combustion Processes
- Fluidized-Bed Combustion
- Coal Preparation
- Alternate Fuels
- Hot Gas Cleanup
- Surface Coal Gasification
- Fuel Cells

- Heat Engines
- Magnetohydrodynamics
- Coal Liquefaction
- Underground Coal Gasification

Coal fired locomotives were addressed directly in seven submissions. The lead submitters for these submissions include General Motors, General Electric, American Coal Enterprises, Brobeck Corp., Systematics General Corp., Shoemaker and Assoc. and National Steam Propulsion Co.

c: The Department is dedicating the services of approximately 50 members of its professional staff to the review of these proposals. These staff members have been divided into 3 working committees, each of which is focused on a major grouping of the technologies represented by the submissions. It is anticipated that the effort will require the services of the full 50 staff members for 3 weeks with continuing effort by a smaller number until the report is prepared.

d: After the submissions have been analyzed, the Department will report to Congress by May 1, 1985 on the potential usefulness of each emerging clean coal technology and the extent to which Federal incentives will accelerate the commercial availability of those technologies, as direct by Congress.

QUESTIONS FROM SENATOR WARNER

CLEAN COAL TECHNOLOGY

Question 71: You assured me and several other Senators, in a private meeting shortly before you were confirmed, that you will give your close personal attention to the Clean Coal Technology program so that DOE would provide Congress with its best technical advice on the relative merits of the proposals. Have you had the opportunity yet to give the program your personal attention? What is your view of it?

Answer: Fossil Energy has received 177 submissions as of March 6, 1985, in response to its Clean Coal Technology solicitation. Each of these submissions currently is being evaluated by one or more of three committees made up of over 50 members of the Fossil Energy technical staff. We expect these teams to complete their review by the middle of March and will submit a report to Congress by the May 1, 1985 due date.

I have been briefed several times on the progress being made on this project. I will review the program more completely when the technical analysis is complete and the results are prepared by the members of the technical staff. I assure you again that these solicitations, the results of the review process, and our report will receive my close personal attention.

QUESTIONS FROM SENATOR WARNER

CLEAN COAL TECHNOLOGY

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| Question 72: | Would you agree that Federal funding to support a Clean Coal Technology program is compatible not only with the Administration's goal of increasing energy independence as well as the cleaner and more efficient burning of coal? |
| Answer: | We agree that Federal support of research and development activities on projects and/or technologies leading to the increased and clean use of coal is compatible with the Administration's goal of lessening dependence on foreign energy as well as the cleaner and more efficient burning of coal. We would emphasize, however, that our FY 1986 budget in this area is fully responsive to this need and reflects a research and development activity that can accomplish those goals in a manner consistent with our policy concerning the respective responsibilities that we believe the government and industry should have in the development of technology. We do not believe that it is necessary to initiate a major demonstration activity in order to achieve our research goals nor to insure that industry has incentives and means to pick up the new technologies that arise from our proposed research and development budget. |

## QUESTIONS FROM SENATOR WARNER

## NATIONAL COAL COUNCIL

Question 73: In October of last year your predecessor established the National Coal Council to enhance better cooperation between the government and industry in coal related matters.

I am an enthusiastic supporter of the Council and look forward to its recommendations.

When do you anticipate the next group of appointments to the Council will be made and when will the Council have its first meeting?

Answer: As you are aware, an initial 23 individuals were appointed to the National Coal Council last October when former Secretary Hodel announced its creation. Under the Council's charter, up to 125 members can be appointed.

I expect to make additional appointments in the very near future. The Department has received more than 350 nominations for the remaining 102 membership positions on the Council. A team of Department officials has completed an evaluation of the nominees and has recommended additional candidate members. I am now reviewing the recommendations.

Once the full membership is completed, an initial organizational meeting will be held. We anticipate that such a meeting will occur this spring.

## QUESTIONS FROM SENATOR WARNER

## FOSSIL FUEL R&D

Question 74: For the first time in its history, the U.S. is importing significant quantities of coal. Meanwhile, our American coal miners are still suffering from double digit unemployment rates, and economic recovery has still not reached the hollows of Appalachia.

This year I anticipate the Subcommittee on Energy and Mineral Resources will conduct hearings on the competitive position of the U.S. coal industry, particularly focusing on energy imports. We've got to look at ways to improve the competitiveness of American coal, and one way is clearly the cleaner and more efficient burning of this fuel.

How can the Administration even suggest a 32 percent cut in fossil fuel research and development funds?

Answer: According to the Energy Information Administration, coal imports averaged 1.4 million tons per year from 1973 through 1983, ranging from a low of 127 thousand tons in 1973 to a high of 3 million tons in 1978. This represented about 0.2% of the coal consumed in the Nation over that period.

Exports of U.S. coal averaged some 71.8 million tons per year -- 52 times the amount of coal imported -- over the 11-year period.

In 1984, coal imports totaled 1.2 million tons, down 3 percent from 1983. Exports totaled 81.5 million tons, up 5 percent over 1983. The balance of coal trade is dramatically in our favor, and that position is improving even further.

We agree wholeheartedly that we need to look at ways to improve the cleaner and more efficient burning of coal. This, indeed, is the major thrust of Fossil Energy's coal research and development program. We believe the President's FY 1986 budget request of $242.7 million provides for a balanced program of long range, high risk, generic research and development that recognizes the need for fiscal constraint. Although this request is about $100 million below the FY 1985 appropriation for Fossil Energy research and development, the essential technology base activities are continuing at about the same funding level. The FY 1986 budget request does not provide funding for the continuation of the Phosphoric Acid Fuel Cell program, the Magnetohydrodynamics program and certain projects proposed for deferral. For FY 1985, these activities total $82.780 million -- $28.912 million for Phosphoric Acid Fuel Cells; $30.977 million for Magnetohydrodynamics; and $22.891 million for deferral of other FY 1985 appropriated funds associated with projects considered inconsistent with the Administration's priorities. We do not believe that these reductions will have a serious effect on Fossil Energy research and development efforts since a significant amount of Federal research has been performed on these technologies. Without including the funding for these activities, the FY 1985 budget is $267.556 million which is only approximately 9.3 percent higher than Fossil Energy's FY 1986 request of $242.671 million. The remaining programs will continue to be conducted at a funding level similar to FY 1985 which demonstrates the Administration's commitment to the Fossil Energy program.

## QUESTIONS FROM SENATOR WARNER

## STRATEGIC PETROLEUM RESERVE MANAGEMENT

Question 75: Let's set aside for a moment the question of the Strategic Petroleum Reserve fill-rate. I'm concerned about the management of the Strategic Petroleum Reserve facilities and our ability to get the oil out of the ground in the event of an emergency.

a. What progress has been made in the last year to improve management efficiency in such areas as developing an inventory management system?

b. What management initiatives will be funded out the fiscal year 1986 budget request?

c. Are you convinced that you are requesting enough money to manage Strategic Petroleum Reserve efficiently?

d. Do you anticipate conducting a drawdown test of Strategic Petroleum Reserve?

Answer: In October 1983, the Oak Ridge Operations Office issued an Strategic Petroleum Reserve baseline assessment report which included 170 recommendations for actions that would provide for improving the reliability, management efficiency, and continued operability of the Reserve. All functional areas of the Strategic Petroleum Reserve project were addressed in this baseline assessment, including property management, audit coverage, procurement, operations, maintenance, etc. During 1984, substantial progress was made in implementing the baseline recommendations, with completion of implementation of all recommendations anticipated by April 1, 1985. Among the more significant recommendations was the integration of contractor efforts by consolidation of selected prime contracts into a broader management, operations, and maintenance (MOM) contract. In December 1984, Boeing Petroleum Services, Inc. was selected for negotiation to become the management, operations and maintenance contractor. The management, operations and maintenance contract negotiations are currently in progress, with plans for Boeing to commence functioning as the management, operations and maintenance contractor on April 1, 1985.

Question 75: (continued)

Management initiatives reflected in the fiscal year 1986 budget include pursuit of an enhanced posture in the areas of security, fire protection, and facilities maintenance. Also, fiscal year 1986 will be the first full year of the Strategic Petroleum Reserve's management, operations and maintenance contract, whereby the integrated project management approach will provide for even further improvement to the overall management of the Strategic Petroleum Reserve program. Emphasis will continue to be placed on contractor business management systems, including accounting, procurement and property.

We believe that the current proposed fiscal year 1986 budget provides for sufficient funding to assure proper management and implementation of the Strategic Petroleum Reserve program; however, should additional requirements be identified during development of plans for transition of the Strategic Petroleum Reserve to a state of readiness to resume capacity development, fill and/or drawdown, we would consider the need for additional resources to meet such requirements.

The Department intends to have a continuing testing program to assure the readiness of Strategic Petroleum Reserve facilities, personnel and administrative/management procedures. This will include one or more exercises in fiscal year 1986. The exact nature of these tests are currently being reviewed.

## QUESTIONS FROM SENATOR WARNER

## OIL OVERCHARGE

Question 36: How much money collected from pricing and allocation violations under the Emergency Petroleum Allocation Act is being held in escrow by DOE at this time?

Answer: As of February 1, 1985, more than $850 million was in the Department's escrow accounts.

## QUESTIONS FROM SENATOR WARNER

### OIL OVERCHARGE

Question 77: How much do you anticipate will ultimately be paid to those directly overcharged?

Answer: Historically, between 10-20% of overcharge recoveries have been needed to provide refunds to those who were directly overcharged.

## QUESTIONS FROM SENATOR WARNER

## OIL OVERCHARGE

Question 78: How big does DOE anticipate the pot will be to pay indirect beneficiaries?

Answer: We anticipate that total overcharge recoveries will amount to $5 to $6 billion, of which 80-90% eventually should be available for second-stage (indirect) distribution.

## QUESTIONS FROM SENATOR MURKOWSKI

## ALASKA POWER ADMINISTRATION

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| Question 79: | The Administration assumes that the State of Alaska will purchase the Alaska Power Administration.<br>Mr. Herrington, the Administration assumes that the State of Alaska will purchase the Alaska Power Administration. Have there been any negotiations or talks with the State of Alaska about such a sale? If so, what are the views of the State of Alaska? |
| Answer: | The Alaska Power Administration has had numerous informal discussions with State officials and has requested a formal expression of the Governor's views. The State has not made a formal expression of its intent in this matter.<br>However, informal contacts look encouraging. As yet, no specific transfer plan is on the table. Federal and State legislation will be needed. The State has taken no formal position, but various State officials have indicated a willingness to discuss the issue. |

QUESTIONS FROM SENATOR MURKOWSKI

ALASKA POWER ADMINISTRATION

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| Question 80: | The Administration has requested zero funding for the APA for FY 1986 based on the assumption that the APA will be sold to the State of Alaska.<br>Mr. Herrington, the Administration's request for FY 1986 for the Alaska Power Administration is premised upon sale of the agency to the State of Alaska. The budget contains zero funds. If we assume that the sale is not made, what level of funding would be needed by APA for FY 1986? |
| Answer: | The Alaska Power Administration's initial budget request was $3.8 million. We can scrutinize that figure to see if it can be reduced in the event funding is necessary in FY 1986. |

## QUESTIONS FROM SENATOR MURKOWSKI

## ALASKA POWER ADMINISTRATION

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| Question 81: | The Administration assumes that the State of Alaska will purchase the Alaska Power Administration.<br>Mr. Herrington, does the DOE have any estimate as to the sale price of the Alaska Power Administration? |
| Answer: | No price has been determined. The terms of sale would be subject to negotiation pursuant to the Federal and State authorizing legislation. |

## QUESTIONS FROM SENATOR MURKOWSKI

## ALASKA POWER ADMINISTRATION

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| Question 82: | The Administration has proposed changes for calculating the rates for sale of power by the five Power Marketing Administrations. It is estimated that rates for the Juneau area, served by the Alaska Power Administraation, would increase by 190 percent.<br>Mr. Herrington, what would be the impact of the proposed ratemaking changes on the areas served by the Alaska Power Administration? |
| Answer: | The budget proposes the sale of the Alaska Power Administration to the State of Alaska. If that does not occur, the proposed repayment changes would require the Alaska Power Administration to increase rates 32 percent for the Eklutna system and 190 percent for the Snettisham system. With this increase in rates, the Eklutna system power would still be marketable in the Anchorage-Palmer area. Marketability of the Snettisham system power would be marginal. |

## QUESTIONS FROM SENATOR JOHNSTON

### NATIONAL SECURITY GOAL

Question 81: Secretary Hodel told the Congress last year that the Administration had set a goal of a Strategic Petroleum Reserve containing the equivalent of 90 days of net United States oil imports.

Are you still committed to that national security goal? Would you lift the temporary moratorium on the Strategic Petroleum Reserve expansion to ensure that that goal is met?

Answer: We plan to review our policies concerning the Strategic Petroleum Reserve on a periodic basis, taking into account oil market conditions and the Federal financial position. I am confident the Reserve would remain equivalent to about 90 days of United States net oil imports during fiscal year 1986. I have not defined a specific set of conditions under which the Strategic Petroleum Reserve fill would be resumed.

## QUESTIONS FROM SENATOR JOHNSTON

## NATIONAL SECURITY GOAL

Question 84: The Energy Information Administration released in January 1985, their Annual Energy Outlook with Projections to 1995 and one of their forecasts (page 277) shows that in 1987 net U.S. oil imports will rise to 6.0 million barrels per day. Adjusting for the Strategic Petroleum Reserve imports in the Energy Information Agency's analysis, you will need 527 million barrels in the SPR by 1987 and so that means that to ensure 90 days U.S. net oil imports you will have to fill the Strategic Petroleum Reserve in fiscal year 1986 at about 100,000 barrels per day, not zero barrels per day as you have proposed in your budget.

Answer: The Energy Information Administration forecast referred to is one of a number of alternative forecasts presented under varying oil market and economic assumptions. The past record of accuracy of EIA (or other) energy forecasts does not encourage placing absolute reliance on such forecasts. In any event, we will be in a better position to judge what is appropriate for 1987 as we reexamine our Strategic Petroleum Reserve policies in the context of the fiscal year 1987 budget process.

## QUESTIONS FROM SENATOR JOHNSTON

### 610 MILLION BARREL RESERVE

Question [illegible]: That same Energy Information Administration import projection shows that by 1990 you will need 667 million barrels in the Strategic Petroleum Reserve in order to have 90 days of net United States oil imports in the Strategic Petroleum Reserve.

Isn't it true that any Strategic Petroleum Reserve greater than 610 million barrels requires the construction of Big Hill?

Answer: Under our current configuration plans, the Big Hill site would represent the last 140 mill'on barrels of a 750 million barrel system. However, if one adjusted the ultimate target to a level above 610 million barrels but well below 750 million barrels, there might be other facilities capacity alternatives which would be more economic than resumption of Big Hill development.

## QUESTIONS FROM SENATOR JOHNSTON

## LEAD TIME FOR BIG HILL

Question 86: The lead time for building Big Hill prior to filling it is about three years, is it not? You would fill Big Hill at about 145,000 barrels per day. If that is true, then in order to have 667 million barrels in the Strategic Petroleum Reserve by 1990 as the Energy Information Administration forecast suggests may be necessary, you have to commence Big Hill again in fiscal year 1986, given the required lead time. Is that correct? Given the lead time, how is it prudent to stop construction on Big Hill? Provide the Committee with your most recent estimates of the marginal cost of adding storage capacity to the Reserve above 489 million barrels.

Answer: It is correct that the lead time from resuming construction of Big Hill to commencement of fill would approach three years. It is also correct that we had previously planned to fill Big Hill over a three-year period from mid-1987 to mid-1990, sustaining an average rate of between 125 and 130 thousand barrels per day. However, at later stages in the leaching process, it may be feasible to fill Big Hill at rates of up to 280 thousand barrels per day.

To complete 667 million barrels in capacity by the end of 1990 would not necessarily require resumption of Big Hill development in fiscal year 1986. Resumption of capacity development at all sites by 1987 would likely result in approximately 660 million barrels of capacity by the end of fiscal year 1990, with the remaining 7 million barrels created in the last calendar quarter of 1990.

The marginal cost of increasing Strategic Petroleum Reserve facilities capacity to 750 million barrels over the 489 million barrels in storage at the end of fiscal year 1985 is estimated at $561 million over the fiscal year 1985 - fiscal year 1990 timeframe or an average of $2.15 per barrel for an added 261 million barrels, exclusive of oil costs.

## QUESTIONS FROM SENATOR JOHNSTON

### 750 MMB RESERVE

Question 87: The only rationale presented in the budget books or your testimony for why an Strategic Petroleum Reserve of only 489 million barrels is adequate is that it gives the country the same level of protection as Congress sought when it approved the current 750 million barrel Strategic Petroleum Reserve.

a. How can you make that argument? Congress was explicitly asked in May 1978 to approve plans for have a one-billion barrel reserve by 1985 including immediate plans for 750 million barrels and Congress was told that plans for the last 250 million barrels would be submitted to them later. Those later plans were never submitted.

b. Are you providing the same protection as Congress thought it was getting from a one-billion barrel Strategic Petroleum Reserve? After all, Congress was informed that oil imports would range from 7 to 11.5 million barrels per day in 1985. That means a one-billion barrel Strategic Petroleum Reserve would provide as much as 142 days of protection. You offer 108 days protection, assuming, of course, that your proposed Strategic Petroleum Reserve could supply 7 million barrels per day and, in fact, the Strategic Petroleum Reserve you propose couldn't pump oil out at half that rate. The Congress was told in 1978 that the drawdown rate for the 750 million barrel Strategic Petroleum Reserve would be 5 million barrels per day.

c. And what about the future? The Energy Information Agency forecast on page 177 shows oil imports in the U.S. going to 11.7 million barrels per day. that's higher than the highest figure cited to the Congress when they approved plans for a one-billion barrel Strategic Petroleum Reserve. It would seem difficult to claim that your Strategic Petroleum Reserve proposal gives the Congress all they sought when they approved the current plan for a 750 million barrel Strategic Petroleum Reserve.

Answer: a. Strategic Petroleum Reserve Plan Amendment Number 2 in 1978 provided an implementation plan for 750 million barrels in underground government storage, leaving decisions unmade on the timing and composition of further development. No Administration has sought, nor has Congress provided, funding for storage in excess of 750 million barrels.

I am informed that consideration may have been given by the prior Administration to requiring industry to store some or all of the last 250 million barrels. This Administration has rejected such a regulatory approach to strategic stockpiling, though we encourage voluntary maintenance of petroleum inventories.

b. A 489 million barrel inventory represents the equivalent of 108 days of projected 1985 U.S. net oil imports exclusive of those for the SPR. This is above the level represented by a 750 million-barrel reserve under the full range of 1985 import forecasts employed in 1978. It is above the 87 days which would be associated by applying an 11.5 million barrels per day assumption to a one billion barrel reserve, but below the 143 days associated with applying a 7 million barrel per day import assumption to a one billion barrel reserve.

Our argument for a near-term moratorium on Strategic Petroleum Reserve development is not, however, based primarily on these days-of-protection estimates but rather on the changed oil market conditions which they illustrate. Due not only to reduced imports below prior projections but also due to the current projections of soft world oil market conditions through 1986, continued fill of the Strategic Petroleum Reserve in the coming year does not have the near-term priority which it once had.

It is true that the original thinking in 1978 was that each Strategic Petroleum Reserve site should be capable of being drawn down in 150 days such that the drawdown rate for a 750 million-barrel system would be 5 million barrels per day. However, when the prior Administration decided to develop a portion of Phase III through expansion of existing sites rather than through the acquisition of new sites in addition to Big Hill, the effect was to lower the drawdown rate to slightly under 4.5 million barrels per day.

The Department's recent analysis of this question suggests that a distribution capability in the range of 4 to 4.5 million barrels per day for a 750 million-barrel system appears quite adequate under a range of plausible disruption scenarios.

c. The Energy Information Agency forecast of 11.7 million barrels per day in United States imports is for 1995 under what is termed the "Low World Oil Price Case." This case also assumes a 31 percent decline in United States production over the coming decade, coupled with a 20 percent increase in consumption. Clearly, there are those who would take exception to this forecast. The key point to be made is that we are faced with a decision on what to do in the near-term, and our policy proposals do not preclude a broad range of responses in future years as we learn more about market conditions.

## QUESTIONS FROM SENATOR JOHNSTON

### DRAWDOWN RATE

Question 88: You say in your prepared statement, "Today, based upon the most recent estimates of our import levels in 1985, a 489-million barrel reserve will hold the equivalent of 108 days of net imports."

In answers for the record from a hearing before this Committee last year the drawdown capability of the 750 million-barrel Strategic Petroleum Reserve was reported as 4.5 million barrels per day, which is about the same level of net United States oil imports assumed in your 108 day figure.

What is the maximum drawdown capability of your 489 million-barrel SPR today? What will that drawdown rate be under your fiscal year 1986 proposal?

Answer: The maximum storage site drawdown capability today is 2.9 million barrels per day. However, due to terminal constraints, distribution is limited to 2.3 million barrels per day. At the end of fiscal year 1985, the 489 million barrel Reserve will have a maximum drawdown capability of 3.25 million barrels per day but will be limited to 2.3 million barrels per day of maximum distribution capability until distribution enhancements in the President's fiscal year 1986 budget proposal are completed. After that time, the Strategic Petroleum Reserve drawdown/ distribution capability will be 3.25 million barrels per day.

## QUESTIONS FROM SENATOR JOHNSTON

### SIZE ANALYSIS

Question 89: In May 1982 the Department of Energy presented to Congress a "Report to the President and the Congress on the Size of the Strategic Petroleum Reserve." That report recommended continued development of a 750 million barrel Strategic Petroleum Reserve and explicitly did not back away from the Strategic Petroleum Reserve plan's provisions for a one-billion barrel SPR. The smallest size Strategic Petroleum Reserve that the Department of Energy even considered in this report was 580 million barrels. Secretary Edwards wrote the President of the Senate on February 26, 1982, requesting 8 weeks more time to do additional analysis for that report. Secretary Hodel reaffirmed to this Committee his support for a 750 million barrel Strategic Petroleum Reserve just 13 months ago.

Where is the analysis to counter all your prior analysis and to substantiate your current position that all we need is 489 million barrels in the Strategic Petroleum Reserve?

Answer: The Administration's fiscal year 1986 budget proposals for a moratorium on Strategic Petroleum Reserve (SPR) development and oil fill address planned activities in the fiscal year 1985 - Fiscal Year 1986 period. These proposals reflect assessments of near-term oil market conditions in relation to near-term Federal financial conditions. The annual budget process both affords the opportunity and establishes the need for both the Administration and the Congress to make tradeoffs and revise schedule plans for the Strategic Petroleum Reserve along with other Federal Government activities. While our current plans are not precisely consistent in all details with the plans of the 1982-1983 period, the differences in regard to the near-term are not substantial. The 1982 report assumed completion of 456-474 million barrels of fill by 1985 with United States import levels of 6.7 to 7.9 million barrels per day and real world oil prices (1981 dollars) of $32 to $36 per barrel in 1985. In current 1985 dollars, these projections would suggest 1985 oil prices in the $38 to $43 per barrel range.

The mid-1983 planning concepts were predicated on $31 per barrel oil prices in 1985 and 464 million barrels in Strategic Petroleum Reserve fill by the end of fiscal year 1985. Energy Information Agency projections of 1985 United States net oil imports from this period ranged from 6.0 to 8.7 million barrels per day.

Our current proposals provide for fill of 489 million barrels by the end of fiscal year 1985--a full 25 million barrels above the mid-1983 plans. Oil price projections are below those used in either 1982 or 1983, and 1985 oil imports are also below prior forecasts.

Thus, there is clear evidence that for the period for which our proposals are designed, we have a slightly higher Strategic Petroleum Reserve oil inventory and face more favorable near-term oil market conditions. The moratorium, even for as long as five years, does not necessarily change long run Strategic Petroleum Reserve objectives if funds become more available in the future.

The 1982 analysis also shows that under many of the scenarios, with conditions less favorable than today, the net expected value of an increase from 580 to 750 was negative.

## QUESTIONS FROM SENATOR JOHNSTON

## ELK HILLS

Question 90: Doesn't your budget proposal for the Strategic Petroleum Reserve violate the requirement in the Energy Security Act that the government's oil from Elk Hills can't be sold for revenues unless the SPR is being filled at 100,0000 barrels per day or until there are 500 million barrels in the SPR? Was the Administration unaware of this provision? What are you going to do about that? Won't that cost the Treasury $1.3 billion per year under your proposal?

Answer: The Energy Security Act amended the Energy Policy and Conservation Act. The Energy Policy and Conservation Act is scheduled to expire June 30, 1985, and decisions regarding the extension of the Energy Policy and Conservation Act or submission of new energy emergency legislation have not been made yet. Any legislation we would support for the period after June 30, 1985, would be consistent with the fiscal year 1986 President's budget. Our fiscal year 1986 budget is proposing a moratorium on The Strategic Petroleum Reserve fill and capacity development at the end of this fiscal year. The timetable for expanding the Reserve beyond the 489 million barrels we will have in storage on September 30, 1985, is indefinite, depending on both oil market conditions and the Federal financial situation.

QUESTIONS FROM SENATOR JOHNSTON

STRATEGIC PETROLEUM RESERVE

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| Question 91: | You have proposed deferring $827 million in funds for SPR oil acquisition, but you have proposed deferring that indefinitely. The FY 1986 budget projections show no use of that money at least through FY 1986 and apparently not even through FY 1990.<br>a. Why isn't this a rescission instead of a deferral? Provide a legal opinion of your General Counsel, explaining why this multi-year deferral isn't in fact a rescission which would require prior Congressional assent? |
| Answer: | Enclosed is a memorandum of law from the Acting General Counsel that addresses your question. |

Enclosure

## MEMORANDUM OF LAW

ISSUE: IS THE PROPOSED DEFERRAL OF $827 MILLION OF STRATEGIC PETROLEUM RESERVE OIL ACQUISITION FUNDS PROPERLY CLASSIFIED AS A DEFERRAL

CONCLUSION: The proposed action is correctly classified as a defferal under the Impoundment Control Act.

ANALYSIS: A "deferral" is defined in section 1011(1) of the Impoundment Control Act, 2 U.S.C. 682, as a withholding or delaying of the obligation or expenditure of budget authority provided for projects or activities, or any other type of Executive action or inaction which effectively precludes the obligation or expenditure of budget authority. The critical element in determining whether a deferral should be reclassified as a rescission is whether, as a matter of law, the funds subject to the deferral cease to be available for obligation or expenditure as a result of the deferral. *See* Comptroller General Decision B-115398, Dec. 23, 1974. *See also* B-200685, Dec. 23, 1980; B-200457, Nov. 26, 1980; and B-200769, Nov. 7, 1980. In most instances this issue becomes relevant when deferred fiscal year funds lapse without being obligated. The Comptroller General has considered such deferrals to be "*de facto* rescissions." This issue, however, does not arise in the present instance since SPR appropriations are "no year" funds that could not lapse if unobligated at the end of the fiscal year. Our proposal not to spend these funds during the current fiscal year would not create a rescission because these funds will remain available for obligation in subsequent fiscal years, and their possible use in those subsequent years will be actively considered.

The goal of filling the SPR to a level of 750 million barrels has not changed. The Department believes, however, that under present circumstances, a fully adequate measure of protection against oil import disruptions is being maintained while saving taxpayers a significant amount of money, as, based upon most recent estimates of prospective 1985 U.S. oil imports, a 489-million barrel reserve represents essentially the same level of protection that we had anticipated from a 750-million barrel reserve in 1978. In each upcoming fiscal year, the Department will re-evaluate the status of SPR, examining such factors as U.S. import projections, world oil market conditions, and domestic energy consumption rates to determine an adequate fill rate to meet our long-term goals. The Department will resubmit a deferral of these funds as required by law if it does not plan on using funds in a subsequent fiscal year.

The Impoundment Control Act requires a rescission to be reported if all or part of any budget authority "will not be required to carry out the full objectives or scope of programs for which it is provided." 2 U.S.C. 683. As the 750 million barrel goal has not changed, the FY 1986 fill moratorium does not obviate the need for the existing budget authority to carry out SPR fill objectives. We do not believe that this provision applies to funds that eventually will be obligated and expended.

The usual context prompting the conclusion that a rescission should occur is that no funds are being, or will be, obligated. The Comptroller General has suggested that as long as the funds are used within the framework of the lump sum appropriation account, the proposed obligation of funds even to redirect a program does not constitute a rescission. See B-115398.33, June 23, 1977. We believe this rationale is equally applicable to the present case in that these funds, when expended, will be used to meet the existing goals of the SPR program.

QUESTIONS FROM SENATOR JOHNSTON

DEFERRAL

Question 91: You have proposed deferring $827 million in funds for the Strategic Petroleum Reserve oil acquisition, but you have proposed deferring that indefinitely. The fiscal year 1986 budget projections show no use of that money at least through fiscal year 1988 and apparently not even through fiscal year 1990.

b. Under what circumstances would you spend this money?

Answer: b. If our continuing evaluation of United States import projections indicated a need to resume filling of the Reserve, we would begin to use these deferred funds for the resumption of oil acquisition activities.

QUESTIONS FROM SENATOR JOHNSTON

SPR EXPANSION

Question 92: We understand that you could expand the Strategic Petroleum Reserve capacity in fiscal year 1986 from 489 million barrels to 550 million barrels for no more than the cost of electricity to run the pumps and some personnel costs. Is that correct?

Answer: To expand Strategic Petroleum Reserve storage capacity from 489 million barrels to 550 million would cost $43 million during the fiscal year 1985-86 period. These funds would provide for operational requirements including but not limited to electric power.

QUESTIONS FROM SENATOR JOHNSTON

ELECTRIC POWER

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| Question 93: | We understand that you are paying $18 million per year in a take-or-pay contract for electricity at these sites, so that you will pay for the electricity even though you won't use it. |
| Answer: | The $18 million for power costs in fiscal year 1986 includes operations and maintenance electric power requirements as well as standby electric power charges. Electric power requirements are being reevaluated at the present time in the context of transition planning for the Strategic Petroleum Reserve. |

## QUESTIONS FROM SENATOR JOHNSTON

## SUNK COSTS AT BIG HILL

Question 94: We understand from answers to questions obtained from the Department of Energy that by the end of fiscal year 1985 you will have spent over $270 million on Phase III and yet you do not propose to use those facilities. Is that correct? You will have spent about $150 million on Big Hill and you propose not completing Big Hill. Is that correct?

Answer: The sunk costs associated with Phase III are estimated to be approximately $273 million at the end of fiscal year 1985. Of this, approximately $170 to $175 million may be associated with Big Hill, though this amount is under review in the context of transition planning. Phase III involves expenditures for storage capacity development at four Strategic Petroleum Reserve sites: Bryan Mound, West Hackberry, Bayou Choctaw and Big Hill. These sites will, at the end of fiscal year 1985, be at various stages of completion. Bryan Mound is the only site where Phase III capacity development has been initiated (it will be 38 percent complete by the end of fiscal year 1985) and will have about 10 million barrels of crude oil stored in Phase III caverns. The proposed moratorium on Strategic Petroleum Reserve fill after fiscal year 1985 is the basis for not proposing a continuation of storage capacity development during fiscal year 1986. During fiscal year 1986, all Phase III facilities will be transitioned to and maintained in a state of standby readiness to resume surface construction, leaching, fill and/or drawdown, as applicable. This readiness condition will allow for a rapid resumption of capacity development and storage whenever a decision is made.

## QUESTIONS FROM SENATOR JOHNSTON

## TERMINATION COSTS

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| Question 95: | What cancellation or termination costs will result from your proposed plans for the Strategic Petroleum Reserve? What are the "mothballing" costs? |
| Answer: | No contracts will be cancelled; therefore, we do not anticipate any termination costs. We do not expect significant additional cost associated with transitioning the operational sites to a standby condition or "mothballing" the Big Hill site. We are currently developing a transistion plan which will address in more detail the specific actions and costs associated with these activities. |

## QUESTIONS FROM SENATOR JOHNSTON

## OIL PRODUCTION

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| Question 96: | In your prepared statement you say, "President Reagan's complete decontrol of domestic oil prices was a major factor in encouraging domestic oil production and reducing U.S dependence on foreign oil." Looking at the EIA reports we see that annual domestic crude oil production since 1980 has varied by no more than 1.8%.<br>To what are you referring in your statement when you speak of "encouraging domestic oil production?" To what extent did President Reagan's complete decontrol encourage oil production beyond President Carter's phased decontrol? |
| Answer: | From 1971 until 1981, Federal price and allocation controls held U.S. oil production below its potential. Government controls kept the price of oil in the U.S. below the world price, reducing incentives for the domestic production of crude oil. The figures for U.S. crude oil supply clearly illustrate the adverse effects that price controls had on domestic petroleum production.<br>During the 1970's under price controls, total U.S. crude oil production declined at an average rate of 1.0 percent per year. In the four years since decontrol, domestic oil production has |

actually increased an average of nearly 0.5 percent per year. In the year prior to decontrol, U.S. crude oil production had declined to 8.6 million barrels per day. By 1984, crude oil production was over 150 thousand barrels per day higher than in 1980. If price controls had remained in effect and domestic production had continued to decline at 1.0 percent per year, the U.S. would have produced 400-600 million barrels less oil in the last four years than it actually did.

President Reagan's complete decontrol and rejection of stand-by allocation authority was an important signal to domestic oil producers that went far beyond phased decontrol in encouraging oil production. Domestic producers were immediately willing to increase exploration and drilling activity because of the expectation that domestically produced oil would receive the world price. The number of oil wells drilled in 1981 showed a 40 percent increase over the previous year. In each year after 1980, over 30 percent more oil wells were drilled than any year prior to 1980. Decontrol has been the major factor in reversing the trend of falling domestic oil production.

Current oil production is running well ahead of levels predicted before this Administration took office. Between December 1979 and November 1980, the Department of Energy (NEP II base case), the Energy Information Administration, the Congressional Budget Office, the General Accounting Office and the Office of Technology Assessment issued forecasts for 1985 domestic crude oil production that ranged from 6 million barrels per day to 8 million barrels per day. Current domestic production is now over 8.8 million barrels per day -- nearly one million more barrels each day than the most optimistic forecasts predicted just five years ago.

With respect to diminished dependency on foreign sources of oil, it should be noted that net imports of crude oil and petroleum products accounted for 43 percent of all crude and product supplied for domestic use in 1977 (after adjustment for stock addition and withdrawals). Since 1977, this measure of import dependence has fallen each year and now stands at 28 percent -- the lowest ever.

## QUESTIONS FROM SENATOR JOHNSTON

### CHANGES IN EXISTING LAW

Question 97: Your budget proposal assumes the passage of a considerable body of legislation, some of which has been considered by the Congress before without much progress. Would you please provide a list of all the substantive changes in law, other than changes in budget numbers, upon which your budget is based and please provide item by item and in total the amount of funds which correspond to these legislative changes.

Answer: There are a number of areas in which the Department's FY 1986 budget is affected by proposed changes in law. Another legislative proposal, Repayment Reform for the Power Marketing Administrations, does not directly affect the Department's FY 1986 budget, but its implementation is expected to increase the Power Marketing Administrations' annual returns to the Treasury from about $1.1 billion to $2.0 billion.

Petroleum Overcharge Restitutions - The budget assumes that the $190.5 million budgeted for the Department's low-income weatherization and schools and hospitals grant programs within the Energy Conservation appropriation will be funded from amounts collected from settlements of alleged violations of crude oil price controls under the Emergency Petroleum Allocation Act of 1973. Legislation to accomplish this will be submitted shortly.

Sale of the Alaska Power Administration - Legislation to authorize the sale of the Alaska Power Administration (APA) to the State of Alaska is in preparation. The FY 1986 budget for the Department assumes the sale will be accomplished in FY 1985, and no funds are requested for APA. In FY 1985, the budget for APA is $3.2 million.

Federal Energy Regulatory Commission Annual Charges - The Federal Energy Regulatory Commission (FERC) will submit legislation this year to authorize it to assess annual charges for licensing natural gas and oil pipelines, as well as other projects. Current FERC annual charges authority covers only hydropower projects. The FY 1986 budget assumes $10 million in annual charges from these new authorities which offset FERC's budget request.

Energy Information Administration (EIA) - Elimination of Certain Reporting Systems - The EIA proposes to eliminate three reporting systems; the Financial Reporting System (FRS); the State Energy Data System (SEDS); and the State Energy Price and Expenditure System (SEPES). The information provided in the FRS is generally available from other sources. Budget savings of $0.5 million are anticipated as a result of this action. The data included in the SEDS and SEPES are derived from primary sources generally available to energy analysts. Elimination of these two systems should save $0.1 million.

Authority to terminate the FRS will be contained in a government-wide Report Reduction Act which will be submitted to Congress in the near future by the Office of Management and Budget.

Elimination of Employment Floors - Certain of the Department's activities are covered by legislatively mandated personnel floors. An Administrative Provision in the Department of Energy's Appropriations bills provides for repeal of these floors. If the floors were maintained in FY 1986, the additional cost would be approximately $8.5 million.

Five Percent Pay Reduction - In common with other government agencies with civilian Federal employees, the Department's budget assumes a 5 percent pay reduction. The pay reduction proposal is estimated to have reduced the FY 1986 budget by approximately $26 million.

Small Business Innovative Research - A General Provision in the President's budget request reduces the assessment on research and development performed by non-Department of Energy personnel from 1.25 percent to 1 percent. This change would reduce the amount of assessments by approximately $5.2 million.

Leasing of Exploration Rights at the Naval Oil Shale Reserves - The FY 1986 budget assumes legislation allowing the Secretary to lease the rights to produce conventional oil and gas at the Naval Oil Shale Reserves. This legislative provision will be included in the FY 1986 Naval Petroleum and Oil Shale Reserves Authorization bill. It is assumed that lease revenue of $3 million would revert to the Treasury in FY 1986.

DOE BUDGET

Question 98: In your prepared statement you say on page 2 that "most of the reduction from the FY 1985 appropriated level results from the decision to propose a moratorium on further development and fill of the Strategic Petroleum Reserve." Isn't it true that if you include the funds for SPR facilities which were appropriated in the FY 1984 Supplemental and made available for FY 1985, that the entire difference between your FY 1986 budget request and the FY 1985 appropriations is accounted for by the SPR moratorium? In fact, had you requested the same level of funding in FY 1986 for the SPR as was available in FY 1985, then your budget would have exceeded the FY 1985 amount, would it not?

Answer: The prepared statement properly identifies the proposed moratorium on further development and fill of the Strategic Petroleum Reserve as the largest single item of difference between the FY 1985 and FY 1986 budgets. Of course, the total difference is the net of a number of program increases and decreases.

If the FY 1986 budget contained the same level of funding for the Strategic Petroleum Reserve as was available in FY 1985, the FY 1986 budget request would exceed FY 1985 by about $166 million.

## QUESTIONS FROM SENATOR JOHNSTON

## CLEAN COAL TECHNOLOGY

Question 99: a. How many responses has the Department received from the Clean Coal Technology program announcement of November 27, 1984 (as amended)?

b. Of these, how many unsolicited proposals were there?

Answer a: As of March 6, 1985, Fossil Energy has received 177 submissions in response to its solicitation on clean coal technologies. Of this total, 16 submissions were just letters of support and general interest. The remaining 161 informational proposals are currently being reviewed.

b: None of the submissions were identified as being unsolicited proposals.

## QUESTIONS FROM SENATOR JOHNSTON

## CLEAN COAL TECHNOLOGY

Question 100: The Draft Summary of the Report of the Energy Research Advisory Board on Clean Coal Use Technologies makes the following comment:

"Within the clean use of coal area the overall DOE program is well dispersed and all major technological areas are covered in some way. However, the budget does not allow DOE to help with the transfer of the new technologies to the private sector and to assure their commercialization. This is the result of basic policy which should be reconsidered.

"In most instances abandoning a development after Proof of Concept has been established, i.e., the current policy, will result in just that, abandonment. The subject of clean use of coal is of major near-term and long-term national importance and deserves a change in this policy. Specifically DOE should assure commercialization by participating in the needed larger scale tests which are characteristic for utility operations before the technology can be adopted."

Would you be willing to reconsider the basic policy underlying your FY 1986 budget request which prevents you from participating in the needed larger scale tests? When will you reconsider?

Answer: We have read, with interest, the comments of the Energy Research Advisory Board as they pertain to the Department of Energy and the Board's position on the role that large scale tests may or may not have in the commercialization of technologies. We do not believe, however, that these comments in themselves, provide any basis for reconsidering the basic policy underlying our FY 1986 budget request. We believe that our position on the respective roles and responsibilities of government and industry in the support of research and development has been shown to be valid by the actions of industry in the continued development of a number of technologies.

## FOSSIL ENERGY

Question 101: On February 6, 1985, the President proposed the deferral of $48.397 million in funds appropriated by the Congress for specific fossil energy research and development programs including MHD, the kilngas project, phosphoric acid fuel cells, and the Wilsonville coal liquefaction plant. The President insists that he needs a line item veto. It looks like you have turned the deferral process into something akin to the line item veto -- perhaps even more useful. You clearly indicate that you intend to terminate the MHD program and phosphoric acid fuel cell program, yet the President sends a deferral instead of a rescission. Of course, the rescission would require affirmative approval by the Congress while the deferral does not. With a line item veto the President must accept all or none of the line item, but a rescission disguised as a deferral allows the President to adjust the funding level. Would you comment on this?

Answer: We believe that proposing deferrals rather than rescissions in the cases you mention is the proper course because it permits Congress to make decisions on the FY 1985 program in the context of its decisions on our FY 1986 budget request. Our FY 1986 budget proposes to use these deferred funds to finance the FY 1986 program. Further, we have informed the Congress that we will take no action to terminate these programs prior to April 1 to give Congress time to consider our proposal.

I do not agree with the comparison of the line item veto and the deferral process. Any Presidential veto would require an extraordinary majority to overturn. A deferral is an executive proposal which Congress can much more easily accept or reject. Moreover, in the cases you mentioned, the President would have to have been prepared to veto these projects when the FY 1985 Interior and Related Agencies Appropriations bill was presented to him for signature. However, at that time, final decisions on the FY 1986 budget had not been made, and a veto at that time would have prejudged the outcome of the budget formulation process.

QUESTIONS FROM SENATOR JOHNSTON

FOSSIL ENERGY

Question 102: You mentioned cuts in fuel cell funding, particularly phosphoric acid fuel cells. Your budget book says, "By FY 1986, the development of the phosphoric acid fuel cell technology will be advanced well beyond the proof-of-concept state, therefore, the Department proposes that any continued development and/or demonstration efforts would be the responsibility of the industrial sector. The Department believes it should turn its attention now to the advanced concepts of molten carbonate and solid oxide cells. Well, you propose to zero phosphoric acid work, a cut of $29 million, but you also propose cutting funding for the advanced systems to which you are turning your attention. Molten carbonate systems would be cut by 28%. How does that follow?

Answer: Phosphoric acid fuel cell systems have matured to the point that the three principal manufacturers (United Technologies, Westinghouse, and Englehard) contemplate commercial offerings and prototype powerplant deliveries by about 1988. Accordingly, it is now appropriate for the Department to withdraw any further funding for phosphoric acid fuel cell systems.

No funding is requested in FY 1986 for continuing the direct fuel reforming concept for the molten carbonate fuel cell. Successful verification of the direct fuel reforming concept in FY 1985 provides the basis for continued development by industry and permits the Department of Energy program to focus its development effort on a single alternate technology systems. This system (United Technologies Corp.) has demonstrated substantial technology advances in FY 1985 and it is planned to continue stack development efforts on this most advanced technology. Therefore, the FY 1986 molten carbonate budget does not continue the direct fuel reformer concepts.

QUESTIONS FROM SENATOR JOHNSTON

FOSSIL ENERGY

Question 103: In several places in your budget books you state in passing as you proposed large cuts in specific programs that DOE is in effect turning over to the private sector responsibility for further development of that technology. What do you mean by saying the "responsibility" lies with the private sector? Is there a ceremony for turning it over to them? Do you notify them? Do they accept responsibility?

Answer: The general policy regarding Department of Energy/Fossil Energy research and development is that the main focus will be on generic research and development. Where certain activities are judged to be sufficiently promising, research and development is continued to the point, referred to as "proof-of-concept," where the private sector can make a reasonably good estimate of the economic potential of the technology. In the process, the Government aggressively seeks private sector cost-sharing, and research participation. Through this and a strong technology-transfer program (e.g., reports, articles, conferences, peer reviews, etc.), interested private sector groups are made aware of Fossil Energy research and development activities and policies and are given the technology base vital to further development and commercialization activities by the marketplace.

Beyond proof-of-concept, the private sector is far better prepared that the Government to evaluate promising candidates, and based on marketplace considerations, select concepts for further development and commercialization. The Government strongly supports such private sector research and development efforts through a variety of mechanisms such as research and development tax credits, incentives for research and development limited partnerships, and support for changes in antitrust policy to allow joint research and development ventures.

## QUESTIONS FROM SENATOR JOHNSTON

## PLANNING FOR AST-5

Question 104: In February of this year DOE officials met in New York City with oil company officials in a meeting of an International Energy Agency subcommittee to discuss plans for the upcoming Allocation System Test No. 5. At that meeting a paper was distributed entitled, "Talking Points on U.S. Proposal for AST-5 Test Rules". It is our understanding that this document, which discusses how our government would like AST-5 to be run, is not available to the public.

Please make a copy available to the Committee.

Why can't it be made available to the public? Is it classified? At what point, if any, will the public be allowed to comment on our Government's proposal?

Answer: The meeting referred to in the question was of the AST-5 Technical Subgroup and took place on January 30-31. This Subgroup, which consists of countries and companies which participate in the International Energy Agency (IEA), was established by the International Energy Agency Standing Group on Emergency Questions to define and resolve the technical design issues of AST-5. At this meeting the issue of the specific test rules to be included in the AST-5 Test Guide was considered.

The talking points in question were used to present initial U.S. views concerning certain test rules. Following extensive airing of the various views of the members of the Subgroup, this matter was left unresolved. Since the meeting in New York there have been numerous discussions concerning these test rules, including a meeting of the Subgroup held on February 26-27. Ultimately, the Subgroup reached a compromise that satisfied the various concerns expressed in these discussions. The International Energy Agency Standing Group on Emergency Questions will now review and discuss the Subgroup proposal.

We would like to point out that the draft Test Guide, which incorporates the agreement reached at the February meeting, has not been approved by the International Energy Agency. The International Energy Agency has advised us that the discussions and written documents (including the talking points in question) concerning the draft Test Guide, and the draft Test Guide itself, are considered to be classified until such time as final approval has been received from the International Energy Agency; such approval is anticipated in the late Spring of this year. Of course, the U.S. honors the classification imposed by international organizations in which it participates.

We will promptly provide a copy of the requested document to the Committee by a separate transmission. We will, of course, be willing to share with the Committee or its staff, the final Test Guide once it is released by the International Energy Agency.

## QUESTIONS FROM SENATOR JOHNSTON

### EPCA EXPIRATION

Question 105: As you know, on June 30, 1985, important provisions of the Energy Policy and Conservation Act expire. Please provide the Committee with a memorandum from the General Counsel describing the authorities that you will lose if the Act is not extended, and the impact of these losses on Federal programs.

This memorandum should discuss in some detail U.S. participation in the International Energy Agency, the management, acquisition of oil for and the drawdown of the Strategic Petroleum Reserve, and any new fields of energy emergency activity that will become available to States in the event that these provisions of EPCA are allowed to lapse and State laws are no longer preempted.

Answer: In response to this request, the Acting General

Counsel has provided the enclosed memorandum.

Enclosure

# MEMORANDUM

Section 531 of the Energy Policy and Conservation Act (EPCA), Pub. L. 94-163, 42 U.S.C. 6401, provides:

> Except as otherwise provided in title I or II, all authority under any provision of title I or II (other than a provision of either such title amending another law) and any rule, regulation, or order issued pursuant to such authority, shall expire at midnight, June 30, 1985....

The ability of the U.S. Government to continue to conduct particular energy program activities which are authorized by the EPCA under other, unexpiring laws, necessarily would be highly dependent upon the specific factual context in which the proposed activities arose. This significantly limits the relevance of advance analytic comments on what might or might not be done as a matter of law to carry out energy programs in the event that the Title I and II EPCA provisions should lapse. Accordingly, while this memorandum describes the statutory authorities that will be lost if the EPCA is not extended, it provides only preliminary general comments regarding the effects of potential EPCA lapse on the affected Departmental programs.

If Section 531 were not amended to extend its expiration date, it appears that it would have the following impacts on the authorities contained in Titles I and II of the EPCA:

## Title I, "Matters Related to Domestic Supply Availability"

### Part A, "Domestic Supply":

Sec. 101, "Coal Conversion," would remain unchanged because this provision amended another law; authority under this section, as amended, already has expired.

Sec. 102, "Incentives to Develop Underground Coal Mines," would expire June 30, 1985.

Sec. 103, "Domestic Use of Energy Supplies and Related Materials and Equipment," would expire June 30, 1985.

Sec. 104, "Materials Allocation," amended another law; this section was extended until September 30, 1986, by the Defense Production Act Amendments of 1984, Pub. L. 98-265.

Sec. 105, "Prohibition of Certain Lease Bidding Arrangements," would expire June 30, 1985.

Sec. 106, "Production of Oil or Gas at the Maximum Efficient Rate and Temporary Emergency Production Rate," would expire June 30, 1985.

Sec. 107, "Major Fuel Burning Stationary Source," would expire June 30, 1985.

Part B, "Strategic Petroleum Reserve," would expire June 30, 1985.

Title II, "Standby Energy Authorities"

Part A, "General Emergency Authorities":

Sec. 201, "Conditions of Exercise of Energy Conservation and Rationing Authorities," and Sec. 202, "Energy Conservation Contingency Plans," would expire June 30, 1985.

Sec. 203, "Rationing Contingency Plan." All authority under this section expired September 30, 1981.

Part B, "Authorities with Respect to International Energy Program," and Part C, "Energy Emergency Preparedness," would expire June 30, 1985.

Potentially significant impacts on Federal programs as a result of EPCA's lapse on June 30, 1985, would appear only to occur with respect to Title I, Part B, concerning the Strategic Petroleum Reserve (SPR), and Title II, Part B, concerning participation in the International Energy Agency (IEA).

1. The SPR Program.

Funds which the Congress has provided expressly for the acquisition of oil for the SPR have been linked to the existence of the off-budget "SPR Petroleum Account" established by EPCA Section 167. With the lapse of Title I, Part B, these appropriations would appear no longer to be available for oil acquisition.

Various other laws, such as the Department of Energy Organization Act, Pub. L. 95-91, 42 U.S.C. 7101 et seq., and on-budget appropriations enacted for the conduct of the SPR program, provide some authority to continue to operate the SPR program in the absence of Title I, Part B. One expiring EPCA authority which may not otherwise be available to the SPR is the Section 159(f)(L) power of condemnation.

The question of the effect of EPCA expiration on drawdown of the SPR is under study, but no conclusions have yet been reached.

### 2. Participation in the IEA.

EPCA Section 252, which provides an antitrust defense for U.S. oil company participation in the International Energy Program (IEP), originally was made effective until June 30, 1979, and subsequently has been extended eight times. Oil companies are the IEA's primary sources of information about conditions in the international oil market and would be the primary actors in redistributing oil if the IEP's emergency sharing provisions were activated. Section 252 makes it possible to assure U.S. oil companies that their participation in the IEA will not be challenged under U.S. antitrust laws which otherwise could expose them to unacceptable risks.

In addition to Section 252, other provisions of the EPCA's Title II, Part B, are due to expire June 30, 1985, including the Section 251 authority for international oil allocation. Other authorities may be available, depending on the circumstances, to support fulfillment of U.S. IEP obligations following an expiration of EPCA, as suggested by the Office of Legal Counsel of the Department of Justice in its November 15, 1982, "Memorandum of Law: Legal Authorities Available to the President to Respond to a Severe Energy Supply Interruption or Other Substantial Reduction in Available Petroleum Products."

No specific "new fields of energy emergency activity that will become available to States in the event that these provisions of EPCA are allowed to lapse" have been identified.

## QUESTIONS FROM SENATOR JOHNSTON
## NUCLEAR WASTE

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| QUESTION 106: | At your confirmation hearing I asked you about the status of implementing the Department's intention to modify contracts for acceptance of spent fuel to "create an obligation for the Department to accept spent fuel in 1998 whether or not a repository is in operation."<br>This obligation is a very important part of the Federal nuclear waste program. Therefore, I am renewing my request for a status report showing what has been done, what is being done and what will be done to make this obligation explicit in spent fuel acceptance contracts. Also provide the Committee with the contract language that will be used to set forth the obligation to accept fuel. |
| ANSWER: | The Department is firmly committed--and we believe obligated--to begin accepting fuel by 1998. The obligation is already contained in the existing contracts, and we have been searching for ways to modify the contract to strengthen this obligation. We have had informal reviews and discussions with contract holders.<br>In choosing the final course, two important factors have emerged. First, now that we have actual standard contracts in place, unilateral changes cannot be made. Therefore, we are not certain that any changes in the contract would be accepted by all contract holders. Secondly, a change to the standard contract can only be made by a rulemaking--a process in which the outcome is unpredictable. We may be faced with other changes in the final contract being more or less acceptable to the contract |

holders than the terms and conditions contained in the present contract. This could result in multiple contracts to cover the waste disposal activities.

The Department and the contract holders have generally agreed that having different contract forms, as opposed to the standard contract form, would complicate and detract from our performance rather than improve it.

Given these two factors, we have been considering other means to accomplish our objectives. For example, we are required to develop acceptance schedules under the contract as it is now written. This approach would give further evidence of our commitment. We are working with current holders to develop both generic and specific approaches to meet this obligation. The current reference schedule will be provided in the Mission Plan. We are also considering interpretive addenda or other informational vehicles not requiring contract modificatons.

As to remedies for failure to perform, we find nothing other than the standard remedies for contract performance on the part of the Federal government and note further that any monetary award would be paid from the Nuclear Waste Fund.

## QUESTION FROM SENATOR JOHNSTON

## ENERGY TAXES

Question 107: What is the status of the Department of Energy's analysis of the energy policy implications of the Department of Treasury's tax simplification program?

Answer: The Department of Energy has been studying the Department of Treasury's program since its publication last November. While our study is not yet complete, the early results suggest that the program would result in a drop in domestic oil and gas production, particularly among independent producers. This decline would result in an increased reliance on imported oil.

Initial results, also, indicate that coal and electricity production and consumption probably would not be affected at the national level but could be affected in certain regions. Prices, however, would increase over time because of increased taxes. Disadvantages in energy markets, of course, needs to be weighed with the effects the proposal would have on other sectors of the economy.

Certain provisions of the proposal (including changing the Accelerated Cost Recovery System to an economic recovery system and eliminating the Investment Tax Credit) would tend to give capital intensive technologies such as nuclear and renewables less of a competitive advantage than they have today when compared to fuel intensive technologies.

QUESTIONS FROM SENATOR JOHNSTON

ENERGY TAXES

Question 107a: What is your personal opinion of the wisdom of the elimination of tax incentives for oil and gas exploration and development?

The elimination of tax incentives for oil and gas exploration and development will reduce domestic supplies of oil and natural gas. The only area of debate is the magnitude of the effect. Our preliminary estimates suggest that oil production will fall by about one half million barrels per day and natural gas by over one trillion cubic feet per year by 1987.

The Department intends to see that such adverse consequences receive due weight in Administration deliberations.

## QUESTIONS FROM SENATOR JOHNSTON

### ENERGY TAXES

Question 107b: What is your personal opinion of the wisdom of the elimination of special investment tax credits for energy production and conversion?

Answer: The Department is currently estimating the effect of the Treasury proposal on alcohol fuel production, alternative fuels production and investments in renewable energy technologies. Our preliminary findings indicate that renewable energy investments will be substantially reduced when existing tax credits expire (December 31, 1985). We also expect that if energy production credits are repealed (as in the Treasury proposal), alcohol fuel and landfill methane investments will be significantly curtailed. These adverse effects must be weighed in the balance with the other effects that tax simplification would have. The Department intends to see that such adverse effects receive due weight in Administration deliberations on this issue.

## QUESTIONS FROM SENATOR JOHNSTON

## ENERGY TAXES

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| Question 107c: | What is your personal opinion of the wisdom of the elimination of tax credits for cogeneration investments? |
| Answer: | Energy tax credits have not been available for cogeneration projects begun after December 31, 1982 (the expiration date for business energy conservation tax credits). Many cogeneration projects are economically attractive and entail relatively low risk compared to most renewable energy projects. This technology is, therefore, not dependent on energy credits for its continuation. |

The Treasury proposal would make cogeneration less attractive than under current law by changing the pattern of capital cost recovery (depreciation). However, because cogeneration is less capital intensive than generation options such as coal or nuclear, the effect of changing depreciation would not be as great on cogeneration as it would be with a coal or nuclear plant.

## QUESTIONS FROM SENATOR JOHNSTON

## ENERGY TAXES

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| Question 107d: | What is your personal opinion of the wisdom of the expiration of tax credits for investments in solar energy and other renewable energy technologies? |
| Answer: | The Department is currently estimating the effect of the Treasury proposal on alcohol fuel production, alternative fuels production and investments in renewable energy technologies. Our preliminary analysis indicates that renewable energy investments will be substantially reduced when existing tax credits expire (December 31, 1985). We also expect that if energy production credits are repealed (as in the Treasury proposal), alcohol fuel and landfill methane investments will be significantly curtailed. These adverse effects must be weighed in the balance with the other effects that tax simplication would have. The Department intends to see that such adverse effects receive due weight in Administration deliberations on this issue. |

## QUESTIONS FROM SENATOR JOHNSTON

## ENERGY TAXES

Question 108: What do you intend to do within the Administration to implement your views on energy tax policy?

Answer: The Department has an obligation to evaluate carefully and raise in the appropriate councils the economic and national security impacts that various tax proposals would have on the energy sectors of our economy and on the economy in general. Additionally, I will represent within the Administration the Department's view that conservation and renewable energy tax credits make sense from the standpoint of energy policy.

## QUESTIONS FROM SENATOR JOHNSTON

### Energy Information Administration

Question 109: Your proposed FY 1986 budget would eliminate the Financial Reporting System.

First, the data collected under this program is useful, as your people working on the analysis of the tax simplification proposal have found.

Second, you are obligated under law to operate this program whether or not Congress specifically earmarks funds for its support. The Department implicitly acknowledged as much in the June 20, 1983, settlement of litigation on precisely this point (Citizen/Labor Energy Coalition, et al. v. Donald P. Hodel, Secretary of Energy, et al.).

Do you agree that, absent Congressional action amending section 205(h) of the Department of Energy Organization Act, you are required to obtain and report to Congress on the information described in that section? If not, please provide a legal analysis upon which your opinion is based. Please advise the Committee of the actions you are taking to implement the FRS in FY 1985 and in FY 1986 until Congress addresses section 205(h). If the FRS requirement is not repealed, how much would be necessary in FY 1986 to comply with the requirements in existing law?

Answer: Recognizing its legislative mandate, the Energy Information Administration will implement the Financial Reporting System in FY 1985 and, absent repeal of the requirement, also plans to implement the Financial Reporting System in FY 1986. The operating cost in FY 1986 for the Financial Reporting System would be $691,000, of which $191,000 would be for 4.5 staff years and $500,000 would be for contracts. If the Financial Reporting System requirement is not repealed, $500,000 would be necessary in FY 1986 to comply with the requirements in existing law. The staff would continue working on the Financial Reporting System rather than being assigned to alternative activities.

## QUESTIONS FROM SENATOR JOHNSTON

### FUELS CONVERSION PROGRAM

Question 110: Once again the DOE FY 1986 budget request provides zero funding for the Fuels Conversion program and is premised upon repeal of the Powerplant and Industrial Fuel Use Act.

a. The FY 1985 budget also provided zero funding for the Fuels Conversion program. Congress appropriated $1.308 million. Have the appropriated funds been obligated?

Answer: The FY 1985 budget request of the Department of Energy included $1.335 million for Fuels Conversion. The $1.308 million that was appropriated by the Congress is being obligated at a rate consistent with the progression of FY 1985. Obligations through January 31, 1985 are $431,809 (33% of obligational availability).

b. If Fuels Conversion activities continue at approximately the same level in FY 1986 as they were in FY 1985, and if PIFUA is not repealed, how much would be necessary to run the program? Please indicate how much would be necessary to process exemption petitions under PIFUA and how much for proposed prohibition orders.

Answer: If the Fuel Use Act is not repealed, approximately $1.0 million would be necessary to continue the Fuels Conversion program in FY 1986. If continued, the activity would be devoted almost exclusively to exemptions petition processing. Essentially all work on proposed prohibition orders will be completed in FY 1985. No additional utility requests for orders are anticipated, the last having been received in May 1983.

c. The FY 1986 budget request is premised upon PIFUA repeal. Yet, in response to questions submitted to you in conjunction with your confirmation, you indicated that the Administration does not intend to submit PIFUA legislation at any time in the near future. Could you please explain these two apparently inconsistent positions?

Answer: In the confirmation process, I said that the Fuel Use Act should be repealed as part of a comprehensive natural gas proposal, which would ultimately be necessary to secure the full benefits of decontrol for America. I also stated my belief that a decision on the submission of such a legislative proposal should await a few months of experience in the NGPA post-decontrol environment. I thus did not dismiss the possibility of a legislative initiative in FY 1985 to achieve comprehensive deregulation of gas and repeal of the Fuel Use Act. A budget request of zero for Fuels Conversion is consistent with our position that the Fuel Use Act should be repealed.

QUESTIONS FROM SENATOR JOHNSTON

State Energy Data System

Question 111: Once again the Department of Energy FY 1986 budget request provides zero funding for the State Energy Data System (SEDS) and the State Energy Price and Expenditures Data System (SEPEDS).

If SEDS and SEPEDS activities were to be continued at approximately the same level in FY 1986 as they were in FY 1985, how much would be necessary to run both programs?

Answer: If we were to retain the State Energy Data System and the State Energy Price and Expenditure Data System in FY 1986, the total operating cost would be $240,000. Of this amount, $100,000 would be for contracts and $140,000 would be for 3.3 Department staff years.

In our budget request, on page 278, we argued that the elimination of the State Energy Data System and the State Energy Price and Expenditure Data System would involve a savings of $100,000. This number reflects contract costs only which are sure to be eliminated when the programs are discontinued. As regards the Department's staff years, how many, if any, would be cut back depends on the Energy Information Administration's need to reallocate resources to other high-priority projects. That reallocation will be undertaken when the final budget figures are in.

## QUESTIONS FROM SENATOR JOHNSTON

### MAGNETOHYDRODYNAMICS

Question 112: Why has the Department scrapped the very carefully developed proposal agreed to last year by DOE and the industry for multiyear funding of the MHD program leading to a major facility retrofit? Please provide the Committee with a copy of that proposal as it was finally worked out. Does the Administration now have substantive problems with the proposal, or is your opposition purely budgetary? What are your problems?

Answer: Attached is a copy of the preliminary transition and program plan which describes the proof-of-concept program for Magnetohydrodynamics. This document was provided to the Congress in June 1984 and the Department has proceeded with the transition from the historic component development program to the proof-of-concept program.

The Administration does not have substantive problems with the plan; however, in light of the severe budgetary constraints the Department has reassessed its priorities for fossil energy technologies and determined that other technologies could contribute more generic information across a broader range of energy markets at lower investment requirements, and with significantly more cost sharing. Magnetohydrodynamics is considered to have development risks and costs which are not affordable in light of current fiscal constraints.

The preliminary transition and program plan called for an expenditure of approximately $150 million. The Department estimated that an FY 1985 funding level of $29.8 million would be necessary. An estimate, by fiscal year, of budget and outyear allocations through the fiscal year 1990, projected expenditures of about $30 million per year with significant cost sharing by industry. By the end of CY 1984, following nearly a year of meetings with the private sector, there was no firm indication from the private sector that significant cost sharing for proof-of-concept testing would be forthcoming.

For these reasons, the Department proposes to terminate the Magnetohydrodynamics program in FY 1985 and no funds have been requested in FY 1986 for Magnetohydrodynamics. It is anticipated that the large amount of equipment and facilities having significant value and owned by the Government can be made available to private industry in a manner that will allow industry to continue the development of the technology consistent with their interests and funding availabilities.

Department of Energy
Washington, D.C. 20585

JUN 7 1984

Honorable Don Fuqua
Chairman, Subcommittee on Energy
  Development and Applications
Committee on Science and Technology
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

In the FY 1985 budget request, the Department of Energy made a commitment to provide the Congress with a plan for the Magnetohydrodynamics (MHD) program envisioned in that request. The purpose of this letter is to submit to you the preliminary transition and program plan for the proposed realignment of the MHD program.

This proposal would change the direction of the FY 1984 MHD program, as well as revise the program presented in the FY 1985 budget request. The historic program which focused on subsystems development would be redirected to a multiyear program targeted on the achievement of integrated proof-of-concept tests at the Component Development and Integration Facility and the Coal Fired Flow Facility. This testing could lead to the design, construction, and operation of an integrated, coal-fired, MHD retrofit.

The proposed program includes a flexible, fund-sharing arrangement designed to elicit a commitment from the private sector. Discussions with industry pertaining to fund sharing were initiated in early February 1984. Prelimin indications suggest that the private sector may be willing to offer some fund sharing. We will be pursuing this matter with prospective fund-sh participants during the remainder of this fiscal year and the final pr plan will reflect the views of the fund-sharing participants.

Based upon the composition of and schedule contained in the revised program plan, the Department estimates that an FY 1985 funding level of $29.8 million is necessary. The Department's 1985 budget request, as contained in the President's January budget, is $17.8 million, or $12.0 million less than needed to implement the revised program. The Department proposes to fund the 1985 program at the $29.8 million level, with the additional $12.0 million to be derived from a combination of adjustments to the 1985 Fossil Energy (FE) research and development (R&D) budget, plus additional recoveries of prior year funding resulting from the closeout of FE contracts. The detailed composition of the funds is shown in the enclosure. Thus, no increase in the 1985 budget request of $272.9 million for FE R&D is necessary.

We trust that the proposed transition and program plan will provide the vehicle to transfer the technology to the private sector for subsequent commercialization.

Sincerely,

William A. Vaughan

William A. Vaughan
Assistant Secretary
Fossil Energy

Enclosures

cc: Honorable F. James Sensenbrenner, Jr.
Ranking Minority Member

IDENTICAL LETTERS SENT TO:

Honorable Don Fuqua
Chairman, Subcommittee on Energy
Development and Applications
Committee on Science and Technology
House of Representatives
Washington, D.C. 20515

cc:
Honorable F. James Sensenbrenner, Jr.
Ranking Minority Member

Honorable Sidney R. Yates
Chairman, Subcommittee on Interior
and Related Agencies
Committee on Appropriations
House of Representatives
Washington, D.C. 20515

cc:
Honorable Joseph M. McDade
Ranking Minority Member

Honorable James A. McClure
Chairman, Committee on Energy
and Natural Resources
United States Senate
Washington, D.C. 20510

cc:
Honorable J. Bennett Johnston
Ranking Minority Member

Honorable Pete Domenici
Chairman, Subcommittee on Energy
Research and Development
Committee on Energy and Natural
Resources
United States Senate
Washington, D.C. 20510

cc:
Honorable Wendell H. Ford
Ranking Minority Member

Honorable James A. McClure
Chairman, Subcommittee on Interior
and Related Agencies
Committee on Appropriations
United States Senate
Washington, D.C. 20510

cc:
Honorable Robert C. Byrd
Ranking Minority Member

Honorable John C. Stennis
United States Senate
Washington, D.C. 20510

Honorable Max Baucus
United States Senate
Washington, D.C. 20510

Honorable John Melcher
United States Senate
Washington, D.C. 20510

Honorable Thad Cochran
United States Senate
Washington, D.C. 20510

Honorable Howard H. Baker, Jr.
United States Senate
Washington, D.C. 20510

Honorable James R. Sasser
United States Senate
Washington, D.C. 20510

Honorable Albert Gore, Jr.
House of Representatives
Washington, D.C. 20515

Honorable Ronald Marlenee
House of Representatives
Washington, D.C. 20515

Honorable Gillespie V. Montgomery
House of Representatives
Washington, D.C. 20515

Honorable Philip R. Sharp
Chairman, Subcommittee on Fossil
and Synthetic Fuels
Committee on Energy and Commerce
House of Representatives
Washington, D.C. 20515

cc:
Honorable Tom Corcoran
Ranking Minority Member

Honorable Don Fuqua
Chairman, Committee on Science
and Technology
House of Representatives
Washington, D.C. 20515

cc:
Honorable Larry Winn
Ranking Minority Member

Honorable Jamie L. Whitten
Chairman, Committee on Appropriations
House of Representatives
Washington, D.C. 20515

cc:
Honorable Silvio O. Conte
Ranking Minority Member

Honorable Mark O. Hatfield
Chairman, Committee on Appropriations
United States Senate

cc:
Honorable John C. Stennis
Ranking Minority Member

Mr. Joseph Hezir
Acting Chief
Nonnuclear Energy Branch
Office of Management and Budget
Washington, D.C. 20503

Honorable Barney Frank
House of Representatives
Washington, D.C. 20515

Honorable Trent Lott
House of Representatives
Wshington, D.C. 20515

Honorable Edward M. Kennedy
United Staes Senate
Washington, D.C. 20510

Honorable Paul E. Tsongas
United States Senate
Washington, D.C. 20510

Honorable Nicholas Mavroules
House of Representatives
Washington, D.C. 20515

Honorable James Cooper
House of Representatives
Washington, D.C. 20515

Honorable Pat Williams
House of Representatives
Washington, D.C. 20515

Honorable Marilyn Lloyd
House of Representatives
Washington, D.C. 20515

Mr. James R. Richards
Inspector General
U.S. Department of Energy
Washington, D.C. 20585

# COAL FIRED MHD SYSTEMS

# PRELIMINARY TRANSITION AND PROGRAM PLAN

June 6, 1984

## Overview

The Department of Energy (DOE) has in close consultation with the private sector, undertaken to realign the national MHD program. This paper outlines DOE's views on how the national program should proceed. The historic program which focused on subsystems development will be redirected to a multiyear program targeted on the achievement of proof-of-concept (POC) testing. Following the successful completion of the POC tests, the next logical MHD development step would be a fully integrated, coal fired, MHD retrofit.

The key components of the new program include:

- The design, construction, and operation of: (1) an integrated topping cycle, (i.e., an MHD power train), (2) an integrated bottoming cycle (i.e., a heat recovery/seed recovery subsystem) and (3) a seed regeneration system. These systems/subsystems will provide proof-of-concepts which are critical to the advancement of the technology to the MHD retrofit stage.
- Baseline subsystems development efforts to acquire the knowledge necessary to proceed with the integrated test facilities and the seed regeneration system.

The POC activities will proceed on concurrent, interrelated paths in a plan that will make optimum use of existing components and facilities.

The proposed program includes a flexible, cost-sharing arrangement designed to elicit a commitment from the private sector in the integrated systems and subsystems. Discussions with industry pertaining to cost-sharing were initiated in early February 1984. Preliminary indications suggest that the private sector may be willing to offer some cost sharing. The amount of cost-sharing will influence the pace of the program.

Assuming that there is adequate cost-sharing and subject to the availability of Congressionally appropriated funds, the new program will be initiated in FY 1985.

A conceptual design of the MHD retrofit system will be started in FY 1985 concurrently with the POC activities. The long duration POC testing of the topping and bottoming cycles will commence in FY 1987. Bench scale seed regeneration work will be initiated in FY 1985, leading to the design, construction and operation of a POC seed regeneration system by the late 1980s.

If the topping and bottoming cycle POC tests described earlier are successful, the next logical step would be the preliminary design (Title I) of the MHD retrofit in FY 1987 and with the detailed design (Title II) in late FY 1987 or early FY 1988. It is expected that at this stage the program would become largely a private sector responsibility with DOE's role limited to providing technical advise and possibly some funding support, depending upon its R&D benefits. In any event, it is premature to make any commitment technically to proceeding with the detailed design and construction of a retrofit project pending results of the POC. These results are not expected until 1987 or 1988.

The total program cost through the POC and conceptual design of an MHD retrofit, including private sector cost-sharing, is estimated to be approximately [illegible] million

The FY 1984 program is directed towards the acquisition of data on the performance and operation of major subsystems. These activities will contribute significantly to the success of the integrated POC activities. Accordingly, the available FY 1984 funds will be focused to ensure the early completion of key activities.

## Background

MHD is the highest temperature heat engine under development within Fossil Energy, hence it has the highest theoretical systems efficiency of any heat engine. However, it is the least mature technically and has the highest cost and longest lead time for ultimate development. The operating principle involves the direct combustion of coal to yield an electrically conductive gas which is then directly converted to electrical power when passed through a magnetic field. Afterwards, the high temperature gas is driven through a boiler to raise steam and generate additional electric power. The high performance (efficiency) potential of MHD power systems could permit its future utilization in electric utility systems. The high temperatures of the MHD combustor also provides the potential for the direct burning of any coal, regardless of its heating value and contaminant content. Environmentally, MHD also offers the advantage that most of the sulfur contained in the coal is removed by the MHD process.

The MHD program has reached a critical decision point; the technology is ready for integrated proof-of-concept system/subsystem tests. It is now time to focus the program on the least-cost, shortest development time path to establish the technology base for MHD power systems so that the private sector can subsequently commercialize the technology.

The technical status of MHD technology has recently been evaluated by Westinghouse, General Electric, Gilbert Associates, Inc., and the Argonne National Laboratory. Their conclusions as to the present technical status of key MHD components and what is required to bring them to a state of technical readiness sufficient for subsequent private sector commercialization include the following:

- The coal preparation and feeding subsystem does not represent a major technical issue. Nevertheless, scaleup, integration with MHD systems, electrical isolation and durability must be demonstrated.
- In the seed subsystem, preparation and feeding are not major technical issues but integration with MHD systems and durability must be demonstrated.
- The oxygen plant is considered commercially available and is not a major technical issue.
- Coal combustor development is considered a key technical issue in that scaleup, performance, and durability all remain to be demonstrated.
- Nozzle development is not a major technical issue. It is considered within the current state-of-the-art but must be integrated with MHD.
- Channel development is considered a key technical issue. Scaleup, long-term performance, and durability, all remain to be demonstrated.

- Diffuser development is not considered a major technical issue. Scaleup and integration with MHD must be demonstrated, however, particularly with regard to channel replacement.
- Inverter development is a moderate technical issue in that the current consolidation and control networks must still be developed and demonstrated.
- Superconducting magnet development is not considered a major technical issue but field constructability and integration with an MHD channel remain to be demonstrated.
- Emission control for MHD is not considered a major technical issue. However, scaleup and demonstration under actual MHD integrated system conditions remain to be undertaken.
- Development of the waste heat boiler, superheater, and low temperature oxidant preheater is considered a key technical issue. No large-scale testing or integration with MHD has yet been undertaken.
- Seed recovery and regeneration are considered key technical issues. Seed recovery has not yet been demonstrated in an integrated system; no process development has been undertaken.
- A high temperature air heater is not required for the early-commercial MHD powerplant concept.
- Economizer and low temperature air heater development are not major technical issues for MHD. These subsystems are already in use in full size powerplants.

While a number of technical issues remain, as described above, the primary uncertainties are:

- Downstream chemistry (seed recovery, seed regeneration, and related issues).
- Large-scale, long-duration, coal-fired, integrated system operation.
- Long duration coal combustor performance and scaling effects. Also more work is needed on channel durability and performance at high interaction levels.

It is estimated that it will take approximately 3 years to develop the necessary design information for the key MHD components for the MHD retrofit. Development of the seed regeneration subsystem data will probably require an additional year or two, i.e., 3-5 years.

DOE has developed a proposed program to serve as the basis of discussions with the Congress and the private-sector pursuant to redirecting the MHD program. The elements of the proposal and a preliminary transition plan are discussed in the remainder of this document.

## Preliminary Transition Plan

The FY 1985 funding will be targeted on bringing the individual components and subsystems to comparable levels of technical maturity. Contractors' activities will primarily focus upon hardware development and testing to produce hardware for long duration testing at the integrated facilities. Hardware and subsystem tests will be continuations of efforts in progress under the FY 1984 program and will make maximum use of existing contractors' hardware and facilities.

It should be recognized that a detailed transition plan cannot be produced at this time because of the preliminary nature of the present program plan. The final program development, planning and implementation must take into consideration that the program will be a cost-shared venture in which the paying parties will expect to exercise a voice proportionate to their contributions. The final program will also be influenced by negotiations on cost-sharing and other program aspects.

## Proposed Approach

The POC test facilities comprise two integrated subsystems, an MHD topping cycle and a steam bottoming cycle. The overall topping cycle layout is prototypical of early commercial plant design in that intermediate-temperature (1200 F), oxygen enriched air would be used as the oxidizer (fully developed and more efficient MHD plants are expected to employ high temperature (2900 F) air as the oxidizer).

As presently contemplated, the MHD topping cycle would be operated with the combustor at approximately 6 atmospheres and electrically isolated. The topping cycle would be capable of being operated continuously for extended periods (100 to 1000 hours) between shutdown. The MHD generator would be operated supersonically utilizing a superconducting magnet capable of continuous operation at a magnetic field strength up to 4.5 Tesla and all power conditioning electronics necessary to optimally interface the channel with the inverter components.

The heat recovery and seed recovery (HRSR) subsystem would incorporate critical elements necessary for the simulation of the MHD steam bottoming cycle. Specifically, the HRSR would include the hardware necessary for steam raising, seed, ash and slag collection, seed recovery from slag/ash mixtures, environmental effluent control, and ancillary components.

Work on the development of seed regeneration subsystems has lagged that of other MHD developmental efforts. As a result, it would not likely be possible to specify the regeneration process requirements in a time-scale compatible with their integration into the detailed HRSR system design. Therefore, the seed regeneration subsystem will be considered independent of the HRSR subsystem; this approach will lead to more flexible operation of the seed regeneration system and will not result in the loss of vital process data. Present preliminary plans include the conduct of bench scale tests followed by the design, construction, and operation of an independent proof-of-concept seed regeneration system.

To minimize costs, it is clear that maximum use must be made of existing MHD facilities and hardware components. The two existing Government-owned MHD facilities will be used for the POC tests. The 50 MWt scale Component Development and Integration Facility (CDIF) will be used for the integrated topping cycle tests. And, the 28 MWt scale Coal Fired Flow Facility (CFFF) will be used for the integrated bottoming cycle tests. The site for the seed regeneration POC tests has not yet been selected.

The current consensus is that it would be most appropriate to utilize an MHD steam connection concept for the retrofit in order to reduce the risks inherent in gas-side connection concepts. Other concepts will continue to be evaluated. The details of system integration depend on the relative size of the steam plant and the MHD topping cycle. The optimal method of integrating the topping and bottoming cycles will depend on the specific steam plant design.

## Program Management

The MHD program management responsibility is assigned to the Director, Office of Advanced Energy Conversion Systems. The program management responsibilities include:

- Preparation of program plan
- Formulation of programmatic justification and overall program c..
- Monitoring and evaluation of program implementation progress

The MHD program implementation responsibility is assigned to the Director, Pittsburgh Energy Technology Center (PETC). The program implementation responsibilities include:

- Preparation of program implementation plan
- Preparation and maintenance of development specifications
- Implementation and monitoring of contracted effort
- Reporting technical progress and costs
- Providing budget requirements to the program manager.

PETC oversees operations at the two aforementioned Government owned, contractor operated facilities; the CDIF and the CFFF. Cost-sharing by the private sector will be implemented through appropriate contractual vehicles which will be administered by the Pittsburgh Energy Technology Center. The immediate focus of procurement activities will be (1) the competitive selection of an integration contractor with the capability, interest, business base, and corporate commitment to pursue commercialization of the MHD technology if small scale testing and operation proves successful, (2) the competitive procurement of an MHD retrofit conceptual design, and (3) the redirection of on-going activities as necessary to achieve the POC objectives described earlier. Private sector fund sharing will be required throughout the MHD POC program.

## QUESTIONS FROM SENATOR JOHNSTON

### MAGNETOHYDRODYNAMICS

Question 113: What makes you assume that industry will accept ownership of the major government MHD test facilities such as the CDIF at this time? If industry is unwilling to accept these facilities at this time, what do you plan to do with them? How much will it cost you to maintain them each year?

Answer: The government-owned Magnetohydrodyanmics facilities have an estimated value of $120 million. The replacement costs would be much greater. As long as researchers need such facilities and equipment, there will be a demand and keen competition for the government's offer to make the facilities and equipment available at no cost.

If for some reason the government cannot divest itself of the Magnetohydrodynamics facilities and equipment, several options exist which include mothballing or dismantlement. The Department estimates the maintenance costs to mothball the Component Development Integration Facility at $615,000 per year and the corresponding cost to mothball the Coal Fired Flow Facility is $730,000 per year. Dismantlement costs have yet to be calculated. They are dependent upon the salvage value of the equipment and scrap that exists at the facilities.

QUESTIONS FROM SENATOR JOHNSTON

ENERGY INFORMATION

Question 114: In a recent Congressional Quarterly article (Jan. 12, 1985, page 77), Mr. Hodel was quoted as claiming "a 23 percent improvement" in U. S. energy efficiency since 1973. Similar statements appear in DOE's latest Annual Report to Congress (page 10). However, in the February 1985 issue of DOE This Month, Mr. Hodel was quoted as citing only "a 13 percent" improvement in U. S. energy efficiency between 1973 and 1984.

a. Which figure are we to believe?

b. If 13 percent, what does this change mean?

Does it mean DOE has changed its estimate of U. S. energy efficiency?

Or, does it mean we are more dependent on energy than we first believed?

c. If 13 percent, what information is available to substantiate this sudden revision?

Do you intend to request a revision of the "energy required per GNP dollar" time series on which the energy efficiency calculation has been based (and presently published in the Monthly Energy Review)?

If so, when do you estimate the corrected time series will be published?

d. Are you aware that energy from firewood, wind and solar alternatives have been excluded from the measurements of our progress in energy efficiency?

Isn't it reasonable to include our use of these alternative energy resources in efficiency calculations since they now contribute over one Quad to domestic energy consumption?

Would you prepare a brief report on this matter?

To expedite the report, would you please limit its contents to information presently on file at DOE including, if necessary, preliminary estimates available to DOE personnel (which you may wish to revise later)?

Answer: a. The 23 percent is correct. The figure 13 percent is a correct measurement of the change from 1980 to the third quarter of 1984; the base year of 1980 was incorrectly reported as 1973 in DOE This Month.

b. See a.

c. See a.

d. We are aware that most of these alternate energy sources are not included in the Energy Information Administration's measurement of energy consumption. However, electricity produced from wood, waste, wind, photovoltaic, and solar thermal energy connected to electric utility distribution systems *is* included in our data. Other uses are excluded from Energy Information Administration data because we do not have regularly reported, long-term data of sufficient reliability and consistency to be included in the official energy accounts.

It should be noted that wood and alternative resources were, for the most part, excluded from both the base year and the subsequent reference year in the Department's claim that energy efficiency in the United States has risen by 23 percent since 1973. Since wood and alternative fuels jointly represent less than 4 percent of the United States energy consumption, the exclusion does not significantly affect the absolute level of our energy efficiency measure. To the extent that these energy sources were left out both in the base year (1973) and the reference year (1984), the efficiency gain, as stated, is a reasonably accurate reflection of fuel use changes in the United States. Using Energy Information Administration estimates of wood energy consumption in 1973 and 1983 (which may not be comparable), we estimate that if wood consumption were included, the efficiency gain would be 21.2 percent rather than 22.5 percent.

In addition, it is important to keep in mind that the United States economy has demonstrated remarkable flexibility in dealing with changes that have occurred in energy markets. This flexibility is larger than many analysts and non-analysts thought possible ten years ago. These changes have occurred in response to economic incentives.

## QUESTIONS FROM SENATOR JOHNSTON

## SHARP DROP IN United States ENERGY EXPENDITURES

Question 115: In the Department of Energy's (DOE) Annual Report to Congress (September, 1984), a description of a major study about oil market disruptions and the U.S. economy includes the statement:

"When a disruption of the world's oil supply occurs, all sectors of the domestic economy react to the resulting lower level of supply and higher prices. In an economy forced to function with less energy, the aggregate supply of all goods declines, while higher energy prices trigger overall product price increases. As the general price level rises, consumers' real income falls and they cut back on their consumption of all goods, as well as energy." (Page 169, emphasis added).

According to information contained in two recent Energy Information Administration (EIA) reports, U.S. energy costs dropped by $98.1 billion between 1981 and 1983. That is, from $456.9 in 1981 to $358.8 billion in 1983. That substantial decline of 21.5 percent in total energy expenditures occurred even though total energy consumption dropped by only 4.4 percent (from 73.9 Quads in 1981 to 70.7 Quads in 1983).

Such a sharp drop in energy costs must have affected the economy since it is equivalent to 3.3 percent of 1981 GNP. (98.1 billion divided by $2,957.8 billion).

a. What effect has the declining net cost of energy had on U.S. economic growth since 1981?

b. Which DOE report addresses this matter with clarity?

c. If none, would you please prepare a brief report that fully details the annual cost of all forms of energy and energy materials to final users from 1970 to the present?

The reported information should include a time series from 1970 to the present in nominal and 1972 constant dollars as well as a forecast to 1990.

In that report, would you also estimate the cost of providing this information on a monthly, quarterly and annual basis in existing DOE publications?

To expedite the report, would you please limit its contents to information presently on file at DOE including, if necessary, preliminary estimates available to DOE personnel (which you may wish to revise later)?

d. Would you prepare a brief report that compares and contrasts the specific economic consequences of the substantial increase in U.S. energy expenditures in the 1970's with the sharp drop in energy expenditures between 1981 and 1983?

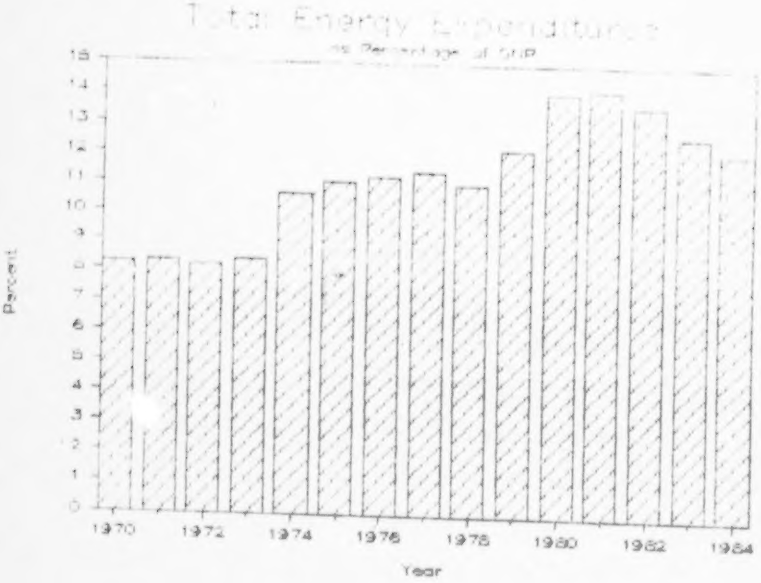
It would be of particular value to include information on the specific effect of reduced energy costs on individual and family buying power as well as on business profits.

To expedite the report, would you please limit its contents to information presently on file at DOE including, if necessary, preliminary estimates available to DOE personnel (which you may wish to revise later)?

Answer: The Energy Information Administration has made no estimate of the effect of the declining net cost of energy on United States economic growth. The attached report entitled "Effects of Lower World Oil Prices" presents an analysis of the effects of lower world oil prices on the economy and the energy area in general. In addition, tables from the Energy Information Administration's upcoming State Energy Price and Expenditure Report, 1970-1982, which show data on prices and expenditures for fuels from 1970 through 1982, are attached. Data showing total energy expenditures as a percent of gross national product is illustrated in the attached figure.

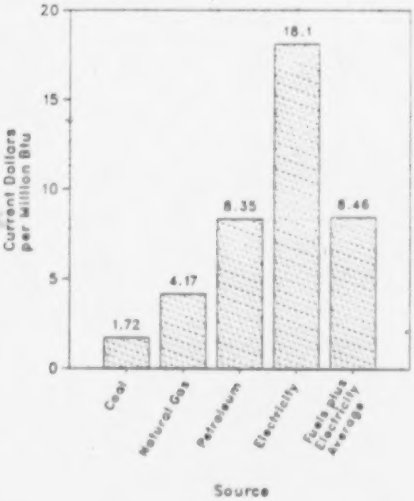
Other than the attached report on the effects of lower world oil prices, the Energy Information Administration has not completed any analysis which contrasts the economic consequences of the increase in United States energy expenditures in the 1970's with the drop between 1981 and 1983.

To provide the requested reports addressing these questions would require several months and a reallocation of resources away from existing work. Providing expenditures information (question c) in Energy Information Administration publications on a monthly or quarterly basis would require substantial expenditures. This information is already provided on an annual basis in the "State Energy Price and Expenditure Report" (draft attached). We estimate the cost of a feasibility study to evaluate the availability, quality, and consistency of the necessary monthly and quarterly price and consumption data and to develop the procedures for estimating the data that are not now collected to be about $100,000. As regards the yearly cost of maintaining and publishing the monthly and quarterly estimates of United States energy expenditures, we are not in a position to provide a reasonably accurate estimate until after such a feasibility study has been completed.

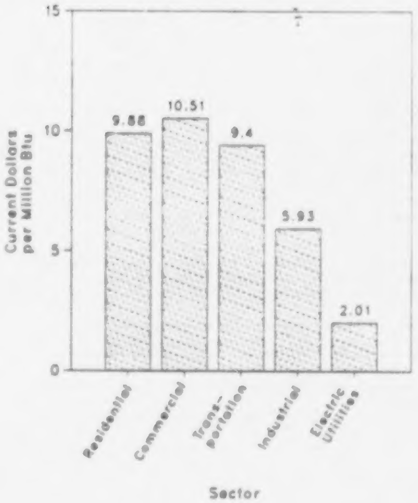


Note: The data for 1983 and 1984 are estimated.

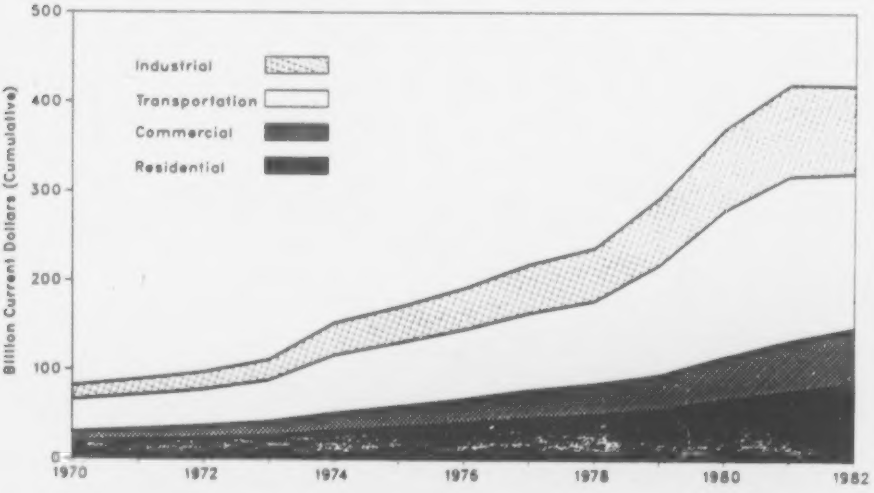
**Fuel and Electricity Average Prices by Source, 1982**



**Fuel and Electricity Average Prices by Sector, 1982**



**Energy Expenditures by Sector, 1970-1982**



State Energy Price and Expenditure Report 1970-1982
Energy Information Administration

## Prices of Fuels and Electricity, 1970-1976, United States (Dollars per Million Btu)

| Energy Source | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
|---|---|---|---|---|---|---|---|
| **Coal** | 0.36 | 0.41 | 0.44 | 0.60 | 1.08 | 1.11 | 1.03 |
| Coking Coal | .46 | .54 | .60 | .70 | 1.40 | 1.70 | 1.70 |
| Steam Coal | .33 | .38 | .40 | .46 | 1.01 | .96 | .90 |
| **Natural Gas** | .59 | .63 | .68 | .72 | .88 | 1.16 | 1.44 |
| **Petroleum Products** | 1.71 | 1.78 | 1.78 | 1.98 | 3.07 | 3.36 | 3.46 |
| Asphalt and Road Oil | .68 | .79 | .82 | .84 | 1.60 | 1.89 | 1.86 |
| Aviation Gasoline | 3.46 | 3.52 | 3.50 | 3.76 | 5.24 | 5.64 | 5.83 |
| Distillate Fuel | 1.14 | 1.20 | 1.20 | 1.44 | 2.44 | 2.60 | 2.77 |
| Jet Fuel | .76 | .82 | .84 | .98 | 1.68 | 2.18 | 2.40 |
| Kerosene | 1.20 | 1.26 | 1.25 | 1.44 | 2.55 | 2.74 | 2.99 |
| LPG and Ethane | 1.47 | 1.49 | 1.52 | 2.04 | 2.84 | 3.00 | 3.24 |
| Lubricants | 5.36 | 5.56 | 5.88 | 5.91 | 8.46 | 9.29 | 9.30 |
| Motor Gasoline | 2.85 | 2.90 | 2.88 | 3.10 | 4.32 | 4.65 | 4.80 |
| Residual Fuel | .42 | .58 | .63 | .78 | 1.81 | 1.91 | 1.98 |
| Other Petroleum Products[a] | .73 | .76 | .78 | .94 | 2.02 | 2.24 | 2.39 |
| **Nuclear** | .18 | .18 | .18 | .21 | .21 | .25 | .26 |
| **Wood and Waste at Utilities** | .68 | .72 | .75 | .79 | .86 | .94 | .99 |
| **Net Imports of Coal Coke** | 1.21 | 1.14 | .96 | .91 | 2.51 | 3.72 | 3.72 |
| **Primary Energy — Five Sectors** | 1.07 | 1.14 | 1.17 | 1.30 | 1.99 | 2.21 | 2.34 |
| —Electric Utility Fuel | .32 | .36 | .42 | .49 | 1.03 | 1.03 | 1.03 |
| + Electricity Purchased by End Users | 5.01 | 5.33 | 5.56 | 5.88 | 7.44 | 8.65 | 9.18 |
| **Total Energy** | 1.65 | 1.76 | 1.84 | 2.03 | 2.88 | 3.35 | 3.59 |

[a] Includes petroleum coke used at electric utilities.
– = no consumption.
Note: There are no purchased fuels for energy sources such as hydroelectric, solar, wind, and geothermal power.
Note: Wood and other biomass fuels are not included except those consumed by the electric utility sector.

## Prices of Fuels and Electricity, 1977-1982, United States (Dollars per Million Btu)

| Energy Source | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
|---|---|---|---|---|---|---|
| **Coal** | 1.14 | 1.33 | 1.33 | 1.43 | 1.63 | 1.72 |
| Coking Coal | 1.77 | 2.00 | 1.95 | 2.16 | 2.41 | 2.50 |
| Steam Coal | 1.03 | 1.22 | 1.23 | 1.33 | 1.54 | 1.66 |
| **Natural Gas** | 1.74 | 1.89 | 2.27 | 2.83 | 3.29 | 4.17 |
| **Petroleum Products** | 3.73 | 3.85 | 5.20 | 7.32 | 8.57 | 8.35 |
| Asphalt and Road Oil | 1.95 | 2.13 | 2.58 | 3.68 | 5.02 | 4.24 |
| Aviation Gasoline | 6.45 | 7.05 | 9.45 | 13.67 | 15.88 | 16.42 |
| Distillate Fuel | 3.11 | 3.26 | 4.63 | 6.70 | 8.03 | 7.77 |
| Jet Fuel | 2.76 | 3.05 | 4.16 | 6.77 | 7.58 | 7.23 |
| Kerosene | 3.33 | 3.50 | 5.10 | 6.87 | 8.67 | 8.45 |
| LPG and Ethane | 3.70 | 3.80 | 4.49 | 5.70 | 6.18 | 6.64 |
| Lubricants | 9.81 | 10.01 | 12.59 | 16.55 | 19.37 | 19.68 |
| Motor Gasoline | 5.09 | 5.24 | 7.06 | 9.75 | 10.86 | 10.36 |
| Residual Fuel | 2.12 | 2.05 | 2.83 | 3.89 | 4.26 | 4.47 |
| Other Petroleum Products* | 2.69 | 2.82 | 3.90 | 5.63 | 6.62 | 6.39 |
| **Nuclear** | .28 | [illegible] ~~.26~~ | .34 | .43 | .48 | .54 |
| **Wood and Waste at Utilities** | 1.04 | 1.12 | 1.56 | 1.80 | 1.24 | 1.12 |
| **Net Imports of Coal Coke** | 3.11 | 3.06 | 3.66 | 3.60 | 3.13 | 2.96 |
| **Primary Energy — Five Sectors** | 2.58 | 2.72 | 3.45 | 4.54 | 5.19 | 5.29 |
| —Electric Utility Fuel | 1.10 | 1.19 ~~1.20~~ | 1.48 | 1.74 | 2.00 | 2.01 |
| + Electricity Purchased by End Users | 10.17 | 11.03 | 11.73 | 14.00 | 16.17 | 18.10 |
| **Total Energy** | 4.00 | 4.25 | 5.20 | 6.88 | 8.01 | 8.46 |

*Includes petroleum coke used at electric utilities

– = no consumption.

Note: There are no purchased fuels for energy sources such as hydroelectric, solar, wind, and geothermal power.

Note: Wood and other biomass fuels are not included except those consumed by the electric utility sector.

## Prices of Fuels and Electricity by Sector, 1970-1976, United States (Dollars per Million Btu)

| Sector and Energy Source | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
|---|---|---|---|---|---|---|---|
| **Residential Sector** | 2.10 | 2.24 | 2.38 | 2.73 | 3.40 | 3.84 | 4.17 |
| Primary Energy | 1.20 | 1.27 | 1.33 | 1.55 | 1.93 | 2.13 | 2.40 |
| Coal | .35 | .97 | 1.05 | 1.17 | 2.19 | 2.39 | 2.31 |
| Natural Gas | 1.06 | 1.12 | 1.19 | 1.26 | 1.42 | 1.67 | 1.94 |
| Petroleum Products | 1.51 | 1.56 | 1.59 | 2.08 | 2.87 | 3.04 | 3.26 |
| Distillate Fuel | 1.33 | 1.41 | 1.41 | 1.64 | 2.61 | 2.74 | 2.94 |
| Kerosene | 1.54 | 1.59 | 1.58 | 1.87 | 2.93 | 3.14 | 3.32 |
| LPG and Ethane | 2.09 | 2.05 | 2.16 | 3.62 | 3.73 | 4.02 | 4.39 |
| Electricity | 6.53 | 6.82 | 7.11 | 7.45 | 9.08 | 10.30 | 10.97 |
| **Commercial Sector** | 1.98 | 2.17 | 2.35 | 2.80 | 3.45 | 4.14 | 4.46 |
| Primary Energy | .79 | .87 | .92 | 1.02 | 1.46 | 1.69 | 1.92 |
| Coal | .41 | .41 | .45 | .45 | .86 | 1.14 | 1.08 |
| Natural Gas | .75 | .80 | .86 | .92 | 1.05 | 1.32 | 1.62 |
| Petroleum Products | .92 | 1.04 | 1.08 | 1.24 | 2.27 | 2.46 | 2.55 |
| Distillate Fuel | 1.10 | 1.16 | 1.17 | 1.37 | 2.28 | 2.47 | 2.65 |
| Kerosene | .77 | .82 | .81 | .97 | 2.17 | 2.33 | 2.67 |
| LPG and Ethane | 1.29 | 1.38 | 1.36 | 1.47 | 2.60 | 2.67 | 2.93 |
| Motor Gasoline | 2.86 | 2.91 | 2.90 | 3.11 | 4.33 | 4.66 | 4.81 |
| Residual Fuel | .50 | .67 | .71 | .86 | 1.92 | 2.03 | 1.98 |
| Electricity | 6.16 | 6.52 | 6.76 | 7.14 | 9.02 | 10.25 | 10.98 |
| **Industrial Sector** | .81 | .90 | .97 | 1.08 | 1.77 | 2.18 | 2.39 |
| Primary Energy | .58 | .64 | .68 | .77 | 1.37 | 1.63 | 1.79 |
| Coal | .44 | .48 | .54 | .61 | 1.19 | 1.47 | 1.46 |
| Coking Coal | .48 | .54 | .60 | .70 | 1.40 | 1.70 | 1.70 |
| Steam Coal | .41 | .41 | .46 | .45 | .85 | 1.12 | 1.07 |
| Natural Gas | .37 | .40 | .44 | .49 | .64 | .90 | 1.15 |
| Petroleum Products | .94 | 1.01 | 1.02 | 1.17 | 2.25 | 2.43 | 2.51 |
| Asphalt and Road Oil | .68 | .79 | .82 | .84 | 1.60 | 1.89 | 1.86 |
| Distillate Fuel | .73 | .76 | .76 | .94 | 2.04 | 2.24 | 2.39 |
| Kerosene | .78 | .81 | .81 | 1.01 | 2.18 | 2.36 | 2.60 |
| LPG and Ethane | 1.12 | 1.18 | 1.20 | 1.33 | 2.46 | 2.55 | 2.75 |
| Lubricants | 5.36 | 5.56 | 5.88 | 5.91 | 8.46 | 9.29 | 9.30 |
| Motor Gasoline | 2.86 | 2.91 | 2.87 | 3.13 | 4.31 | 4.65 | 4.82 |
| Residual Fuel | .46 | .61 | .66 | .80 | 1.83 | 1.92 | 1.90 |
| Other Petroleum Products | .73 | .76 | .76 | .94 | 2.04 | 2.24 | 2.39 |
| Net Imports of Coal Coke | 1.21 | 1.14 | .96 | .91 | 2.51 | 3.72 | 3.72 |
| Electricity | 3.00 | 3.24 | 3.41 | 3.67 | 4.98 | 6.06 | 6.47 |
| **Transportation Sector** | 2.32 | 2.39 | 2.39 | 2.59 | 3.72 | 4.06 | 4.21 |
| Primary Energy | 2.32 | 2.39 | 2.39 | 2.59 | 3.72 | 4.05 | 4.21 |
| Coal | .38 | .40 | .44 | .43 | .83 | 1.11 | 1.08 |
| Petroleum Products | 2.32 | 2.39 | 2.39 | 2.59 | 3.72 | 4.05 | 4.21 |
| Aviation Gasoline | 3.46 | 3.52 | 3.50 | 3.76 | 5.24 | 5.64 | 5.83 |
| Distillate Fuel | 1.29 | 1.37 | 1.37 | 1.65 | 2.61 | 2.77 | 2.94 |
| Jet Fuel | .78 | .82 | .82 | .97 | 1.67 | 2.18 | 2.39 |
| LPG and Ethane | 1.13 | 1.20 | 1.22 | 1.38 | 2.50 | 2.54 | 2.75 |
| Lubricants | 5.36 | 5.56 | 5.88 | 5.91 | 8.46 | 9.29 | 9.30 |
| Motor Gasoline | 2.85 | 2.90 | 2.88 | 3.10 | 4.32 | 4.64 | 4.80 |
| Residual Fuel | .38 | .49 | .53 | .64 | 1.41 | 1.45 | 1.52 |
| Electricity | 3.74 | 4.13 | 4.37 | 4.51 | 6.45 | 7.16 | 7.73 |
| **Total Energy** | 1.66 | 1.78 | 1.94 | 2.03 | 2.88 | 3.35 | 3.58 |
| Primary Energy — Four Sectors | 1.30 | 1.38 | 1.42 | 1.58 | 2.33 | 2.66 | 2.84 |
| Electricity | 5.01 | 5.33 | 5.56 | 5.88 | 7.44 | 8.65 | 9.18 |
| **Electric Utility Sector** | .32 | .38 | .42 | .49 | 1.03 | 1.03 | 1.03 |
| Coal | .31 | .38 | .38 | .45 | 1.03 | .94 | .86 |
| Natural Gas | .28 | .31 | .33 | .35 | .49 | .75 | 1.03 |
| Petroleum Products | .42 | .58 | .66 | .81 | 1.89 | 2.00 | 1.96 |
| Distillate Fuel | .62 | .76 | .81 | 1.02 | 2.14 | 2.19 | 2.36 |
| Jet Fuel | — | — | 1.63 | 1.76 | 2.35 | 2.38 | 2.50 |
| Petroleum Coke | .77 | .84 | .86 | .81 | .92 | .98 | 1.22 |
| Residual Fuel | .40 | .58 | .63 | .78 | 1.87 | 1.98 | 1.95 |
| Nuclear | .18 | .18 | .18 | .21 | .21 | .25 | .26 |
| Wood and Waste | .69 | .72 | .75 | .79 | .86 | .94 | .99 |
| **Primary Energy — Five Sectors** | 1.07 | 1.14 | 1.17 | 1.30 | 1.99 | 2.21 | 2.34 |

— = no consumption.
Note: There are no purchased fuels for energy sources such as hydroelectric, solar, wind, and geothermal power.
Note: Wood and other biomass fuels are not included except those consumed by the electric utility sector.

## Prices of Fuels and Electricity by Sector, 1977-1982, United States (Dollars per Million Btu)

| Sector and Energy Source | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
|---|---|---|---|---|---|---|
| **Residential Sector** | **4.82** | **5.19** | **6.01** | **7.55** | **8.93** | **9.86** |
| Primary Energy | 2.79 | 2.95 | 3.56 | 4.55 | 5.30 | 5.89 |
| Coal | 2.49 | 2.58 | 2.47 | 2.72 | 3.33 | 3.33 |
| Natural Gas | 2.31 | 2.50 | 2.91 | 3.60 | 4.19 | 5.05 |
| Petroleum Products | 3.67 | 3.82 | 5.16 | 7.26 | 8.74 | 8.80 |
| Distillate Fuel | 3.32 | 3.56 | 4.83 | 7.04 | 8.72 | 8.53 |
| Kerosene | 3.78 | 4.04 | 5.61 | 7.97 | 10.53 | 10.37 |
| LPG and Ethane | 4.91 | 4.76 | 6.55 | 7.90 | 8.32 | 9.26 |
| Electricity | 11.90 | 12.65 | 13.63 | 15.73 | 18.18 | 19.93 |
| **Commercial Sector** | **5.21** | **5.65** | **6.24** | **7.97** | **9.66** | **10.51** |
| Primary Energy | 2.30 | 2.45 | 3.11 | 4.07 | 4.78 | 5.18 |
| Coal | 1.16 | 1.27 | 1.26 | 1.36 | 1.52 | 1.67 |
| Natural Gas | 2.00 | 2.20 | 2.69 | 3.32 | 3.89 | 4.73 |
| Petroleum Products | 2.89 | 3.00 | 4.17 | 5.81 | 7.18 | 6.80 |
| Distillate Fuel | 3.02 | 3.18 | 4.51 | 6.53 | 8.06 | 7.84 |
| Kerosene | 2.97 | 3.15 | 4.81 | 6.47 | 7.77 | 7.51 |
| LPG and Ethane | 3.44 | 3.53 | 3.99 | 5.17 | 5.95 | 6.26 |
| Motor Gasoline | 5.12 | 5.28 | 7.09 | 9.68 | 10.88 | 10.41 |
| Residual Fuel | 2.27 | 2.20 | 3.10 | 4.44 | 5.48 | 4.87 |
| Electricity | 12.17 | 13.12 | 13.49 | 16.25 | 18.68 | 20.23 |
| **Industrial Sector** | **2.75** | **2.96** | **3.58** | **4.59** | **5.35** | **5.93** |
| Primary Energy | 2.06 | 2.17 | 2.76 | 3.62 | 4.18 | 4.47 |
| Coal | 1.52 | 1.70 | 1.67 | 1.81 | 1.98 | 2.03 |
| Coking Coal | 1.77 | 2.00 | 1.95 | 2.16 | 2.41 | 2.50 |
| Steam Coal | 1.15 | 1.30 | 1.29 | 1.37 | 1.53 | 1.68 |
| Natural Gas | 1.41 | 1.49 | 1.87 | 2.43 | 2.98 | 3.62 |
| Petroleum Products | 2.79 | 2.89 | 3.86 | 5.38 | 6.39 | 6.21 |
| Asphalt and Road Oil | 1.95 | 2.13 | 2.58 | 3.68 | 5.02 | 4.24 |
| Distillate Fuel | 2.69 | 2.84 | 3.91 | 5.63 | 6.64 | 6.41 |
| Kerosene | 2.93 | 3.10 | 4.85 | 6.30 | 7.77 | 7.36 |
| LPG and Ethane | 3.20 | 3.12 | 4.07 | 5.25 | 5.76 | 6.17 |
| Lubricants | 9.81 | 10.01 | 12.59 | 16.55 | 19.37 | 19.68 |
| Motor Gasoline | 5.11 | 5.26 | 7.06 | 9.67 | 10.80 | 10.39 |
| Residual Fuel | 2.15 | 2.12 | 2.77 | 3.71 | 4.50 | 4.36 |
| Other Petroleum Products | 2.69 | 2.84 | 3.91 | 5.63 | 6.64 | 6.41 |
| Net imports of Coal Coke | 3.11 | 3.06 | 3.66 | 3.60 | 3.13 | 2.96 |
| Electricity | 7.35 | 8.20 | 8.97 | 10.81 | 12.46 | 14.42 |
| **Transportation Sector** | **4.49** | **4.62** | **6.21** | **8.61** | **9.79** | **9.40** |
| Primary Energy | 4.48 | 4.62 | 6.20 | 8.61 | 9.78 | 9.40 |
| Coal | 1.14 | — | — | — | — | — |
| Petroleum Products | 4.48 | 4.62 | 6.20 | 8.61 | 9.78 | 9.40 |
| Aviation Gasoline | 6.45 | 7.05 | 9.45 | 13.67 | 15.88 | 16.42 |
| Distillate Fuel | 3.28 | 3.39 | 5.00 | 7.12 | 8.46 | 8.14 |
| Jet Fuel | 2.75 | 3.05 | 4.16 | 6.78 | 7.58 | 7.23 |
| LPG and Ethane | 3.24 | 3.22 | 4.05 | 5.23 | 5.92 | 6.34 |
| Lubricants | 9.81 | 10.01 | 12.59 | 16.55 | 19.37 | 19.68 |
| Motor Gasoline | 5.09 | 5.23 | 7.06 | 9.75 | 10.86 | 10.36 |
| Residual Fuel | 1.68 | 1.51 | 2.38 | 3.18 | 4.11 | 3.85 |
| Electricity | 7.92 | 9.54 | 10.15 | 12.12 | 13.32 | 15.28 |
| **Total Energy** | **4.00** | **4.25** | **5.20** | **6.86** | **8.01** | **8.46** |
| Primary Energy — Four Sectors | 3.16 | 3.32 | 4.28 | 5.81 | 6.71 | 6.87 |
| Electricity | 10.17 | 11.03 | 11.73 | 14.00 | 16.17 | 18.10 |
| **Electric Utility Sector** | **1.19** | 1.29 ~~**1.09**~~ | **1.48** | **1.74** | **2.00** | **2.01** |
| Coal | 1.00 | 1.20 | 1.22 | 1.32 | 1.53 | 1.65 |
| Natural Gas | 1.28 | 1.42 | 1.74 | 2.19 | 2.79 | 3.36 |
| Petroleum Products | 2.23 | 2.18 | 3.06 | 4.34 | 5.42 | 4.96 |
| Distillate Fuel | 2.60 | 2.74 | 4.42 | 5.75 | 7.10 | 6.90 |
| Jet Fuel | 2.77 | 2.95 | 4.32 | 6.09 | 7.87 | 7.74 |
| Petroleum Coke | 1.20 | .85 | 1.48 | 2.67 | .97 | 1.15 |
| Residual Fuel | 2.19 | 2.14 | 2.99 | 4.25 | 5.32 | 4.85 |
| Nuclear | .28 | .30 ~~.34~~ | .34 | .43 | .48 | .54 |
| Wood and Waste | 1.04 | 1.12 | 1.56 | 1.80 | 1.24 | 1.12 |
| **Primary Energy — Five Sectors** | **2.56** | **2.72** | **3.46** | **4.54** | **5.19** | **5.29** |

— = no consumption.
Note: There are no purchased fuels for energy sources such as hydroelectric, solar, wind, and geothermal power.
Note: Wood and other biomass fuels are not included except those consumed by the electric utility sector.

## Expenditures for Fuels and Electricity, 1970-1976, United States (Million Dollars)

| Energy Source | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
|---|---|---|---|---|---|---|---|
| **Coal** | 4,396 | 4,734 | 5,292 | 6,481 | [illegible] | 13,939 | 13,932 |
| Coking Coal | 1,153 | 1,158 | 1,373 | 1,716 | 3,270 | 3,680 | 3,725 |
| Steam Coal | 3,244 | 3,576 | 3,920 | 4,765 | 10,367 | 10,259 | 10,206 |
| **Natural Gas** | 10,882 | 12,050 | 13,153 | 13,813 | 16,218 | 17,773 | 24,767 |
| **Petroleum Products** | 47,814 | 51,706 | 55,596 | 66,270 | 97,201 | 103,835 | 115,099 |
| Asphalt and Road Oil | 731 | 878 | 926 | 1,058 | 1,865 | 1,914 | 1,856 |
| Aviation Gasoline | 347 | 318 | 299 | 314 | 429 | 400 | 393 |
| Distillate Fuel | 6,130 | 6,786 | 7,445 | 9,412 | 15,180 | 15,660 | 18,373 |
| Jet Fuel | 1,539 | 1,690 | 1,790 | 2,129 | 3,414 | 4,466 | 4,854 |
| Kerosene | 650 | 649 | 607 | 645 | 932 | 900 | 1,049 |
| LPG and Ethane | 2,455 | 2,534 | 2,900 | 3,966 | 5,325 | 5,280 | 6,059 |
| Lubricants | 1,615 | 1,663 | 1,885 | 2,121 | 2,908 | 2,827 | 3,143 |
| Motor Gasoline | 31,597 | 33,487 | 35,342 | 39,677 | 54,127 | 59,445 | 64,459 |
| Residual Fuel | 2,045 | 2,938 | 3,538 | 4,822 | 10,452 | 10,257 | 11,571 |
| Other Petroleum Products* | 704 | 767 | 862 | 1,126 | 2,569 | 2,685 | 3,341 |
| **Nuclear** | 44 | 76 | 105 | 196 | 270 | 468 | 539 |
| **Wood and Waste at Utilities** | 3 | 2 | 3 | 3 | 2 | 2 | 3 |
| **Net Imports of Coal Coke** | -73 | -40 | -26 | -8 | 147 | 53 | * |
| **Primary Energy — Five Sectors** | 63,065 | 68,531 | 74,123 | 86,754 | 127,475 | 136,070 | 154,338 |
| —Electric Utility Fuel | 4,321 | 5,453 | 6,485 | 8,210 | 17,134 | 17,555 | 19,080 |
| + Electricity Purchased by End Users | 23,489 | 26,371 | 29,821 | 33,901 | 42,733 | 50,876 | 57,267 |
| **Total Energy** | 82,233 | 89,449 | 97,459 | 111,446 | 153,074 | 171,391 | 192,525 |

*Includes petroleum coke used at electric utilities.
— = no consumption.
(*) = number less than 0.5 rounded to zero.
Note: Totals may not equal sum of components due to independent rounding.
Note: There are no purchased fuels for energy sources such as hydroelectric, solar, wind, and geothermal power.
Note: Wood and other biomass fuels are not included except those consumed by the electric utility sector.

--- FRAME 3 --- THURSDAY, FEBRUARY 14, 1985. CLOCK TIME 22:50:54.34.

## Expenditures for Fuels and Electricity, 1977-1982, United States (Million Dollars)

| Energy Source | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
|---|---|---|---|---|---|---|
| **Coal** | 15,781 | 18,178 | 19,909 | 21,993 | 25,880 | 26,166 |
| Coking Coal | 3,564 | 3,688 | 3,903 | 3,743 | 3,815 | 2,656 |
| Steam Coal | 12,217 | 14,490 | 16,005 | 18,251 | 22,065 | 23,510 |
| **Natural Gas** | 29,119 | 32,034 | 40,160 | 50,586 | 59,960 | 67,659 |
| **Petroleum Products** | 130,833 | 137,917 | 182,414 | 236,135 | 259,698 | 238,569 |
| Asphalt and Road Oil | 2,065 | 2,471 | 2,977 | 3,543 | 4,157 | 3,514 |
| Aviation Gasoline | 454 | 504 | 664 | 880 | 893 | 772 |
| Distillate Fuel | 21,975 | 23,649 | 32,482 | 40,806 | 48,231 | 44,036 |
| Jet Fuel | 5,859 | 6,594 | 9,165 | 14,838 | 15,636 | 14,974 |
| Kerosene | 1,207 | 1,273 | 1,983 | 2,257 | 2,276 | 2,251 |
| LPG and Ethane | 6,909 | 6,632 | 9,368 | 11,027 | 11,894 | 12,896 |
| Lubricants | 3,469 | 3,804 | 5,002 | 5,858 | 6,574 | 6,091 |
| Motor Gasoline | 70,048 | 74,402 | 95,166 | 123,311 | 137,116 | 129,945 |
| Residual Fuel | 14,262 | 13,542 | 17,639 | 21,624 | 22,448 | 16,958 |
| Other Petroleum Products* | 4,585 | 5,048 | 7,967 | 11,991 | 10,474 | 7,132 |
| **Nuclear** | 743 | ~~1,026~~ | 942 | 1,182 | 1,439 | 1,869 |
| **Wood and Waste at Utilities** | 5 | 4 | 8 | 5 | 5 | 4 |
| **Net Imports of Coal Coke** | 47 | 401 | 241 | -132 | -52 | -67 |
| **Primary Energy — Five Sectors** | 176,529 | 189,599 | 243,673 | 309,775 | 346,929 | 334,000 |
| —Electric Utility Fuel | 23,935 | 26,864 | 30,989 | 37,057 | 43,215 | 41,292 |
| + Electricity Purchased by End Users | 66,638 | 74,866 | 81,728 | 98,475 | 116,624 | 126,953 |
| **Total Energy** | 219,231 | 237,765 | 294,412 | 371,192 | 420,338 | 419,661 |

*Includes petroleum coke used at electric utilities.
– = no consumption.
(*) = number less than 0.5 rounded to zero.
Note: Totals may not equal sum of components due to independent rounding.
Note: There are no purchased fuels for energy sources such as hydroelectric, solar, wind, and geothermal power.
Note: Wood and other biomass fuels are not included except those consumed by the electric utility sector.

--- FRAME 4 --- THURSDAY, FEBRUARY 14, 1985. CLOCK TIME 22:50:54.34.

## Expenditures for Fuels and Electricity by Sector, 1970-1976, United States (Million Dollars)

| Sector and Energy Source | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
|---|---|---|---|---|---|---|---|
| **Residential Sector** | 19,904 | 21,843 | 24,023 | 26,968 | 32,518 | 36,866 | 41,745 |
| Primary Energy | 9,507 | 10,211 | 10,959 | 12,248 | 14,596 | 16,190 | 19,047 |
| Coal | 53 | 139 | 116 | 127 | 229 | 206 | 194 |
| Natural Gas | 5,295 | 5,734 | 6,239 | 6,259 | 6,978 | 8,407 | 9,996 |
| Petroleum Products | 4,159 | 4,338 | 4,604 | 5,863 | 7,389 | 7,577 | 8,856 |
| Distillate Fuel | 2,490 | 2,666 | 2,819 | 3,281 | 4,812 | 4,952 | 5,833 |
| Kerosene | 459 | 469 | 432 | 426 | 538 | 505 | 613 |
| LPG and Ethane | 1,211 | 1,202 | 1,354 | 2,156 | 2,039 | 2,120 | 2,411 |
| Electricity | 10,397 | 11,632 | 13,064 | 14,720 | 17,922 | 20,675 | 22,698 |
| **Commercial Sector** | 10,777 | 12,138 | 13,543 | 15,296 | 19,652 | 23,132 | 26,677 |
| Primary Energy | 3,369 | 3,724 | 4,012 | 4,456 | 6,107 | 6,755 | 8,258 |
| Coal | 88 | 84 | 70 | 67 | 132 | 143 | 131 |
| Natural Gas | 1,854 | 2,089 | 2,297 | 2,445 | 2,749 | 3,388 | 4,398 |
| Petroleum Products | 1,427 | 1,571 | 1,645 | 1,944 | 3,225 | 3,224 | 3,729 |
| Distillate Fuel | 646 | 693 | 736 | 883 | 1,358 | 1,447 | 1,740 |
| Kerosene | 47 | 45 | 45 | 63 | 118 | 115 | 117 |
| LPG and Ethane | 131 | 140 | 151 | 155 | 251 | 249 | 284 |
| Motor Gasoline | 247 | 244 | 253 | 270 | 360 | 415 | 466 |
| Residual Fuel | 355 | 449 | 460 | 573 | 1,139 | 998 | 1,121 |
| Electricity | 7,408 | 8,414 | 9,530 | 10,839 | 13,546 | 16,377 | 18,418 |
| **Industrial Sector** | 15,987 | 17,454 | 19,516 | 23,013 | 36,159 | 40,056 | 46,185 |
| Primary Energy | 10,336 | 11,162 | 12,327 | 14,710 | 24,951 | 26,306 | 30,116 |
| Coal | 2,012 | 1,871 | 2,129 | 2,411 | 4,509 | 5,266 | 5,204 |
| Coking Coal | 1,153 | 1,158 | 1,373 | 1,716 | 3,270 | 3,660 | 3,725 |
| Steam Coal | 859 | 713 | 757 | 695 | 1,238 | 1,606 | 1,479 |
| Natural Gas | 2,585 | 2,963 | 3,264 | 3,809 | 4,754 | 5,543 | 7,116 |
| Petroleum Products | 5,811 | 6,368 | 6,960 | 8,497 | 15,542 | 15,424 | 17,795 |
| Asphalt and Road Oil | 731 | 878 | 928 | 1,058 | 1,865 | 1,914 | 1,856 |
| Distillate Fuel | 877 | 945 | 1,023 | 1,345 | 2,686 | 2,922 | 3,584 |
| Kerosene | 145 | 134 | 131 | 157 | 275 | 281 | 319 |
| LPG and Ethane | 1,083 | 1,155 | 1,350 | 1,603 | 2,934 | 2,815 | 3,260 |
| Lubricants | 829 | 845 | 957 | 1,155 | 1,584 | 1,389 | 1,544 |
| Motor Gasoline | 824 | 799 | 728 | 800 | 1,013 | 1,039 | 1,017 |
| Residual Fuel | 633 | 861 | 997 | 1,266 | 2,653 | 2,381 | 2,896 |
| Other Petroleum Products | 689 | 751 | 846 | 1,113 | 2,551 | 2,683 | 3,339 |
| Net Imports of Coal Coke | -73 | -40 | -26 | -8 | 147 | 53 | * |
| Electricity | 5,651 | 6,291 | 7,189 | 8,303 | 11,208 | 13,750 | 16,070 |
| **Transportation Sector** | 35,565 | 38,015 | 40,376 | 46,169 | 64,745 | 71,337 | 77,919 |
| Primary Energy | 35,533 | 37,980 | 40,339 | 46,131 | 64,687 | 71,264 | 77,838 |
| Coal | 3 | 2 | 2 | 1 | 1 | 1 | * |
| Petroleum Products | 35,530 | 37,978 | 40,338 | 46,129 | 64,686 | 71,263 | 77,837 |
| Aviation Gasoline | 347 | 318 | 299 | 314 | 429 | 400 | 393 |
| Distillate Fuel | 2,031 | 2,330 | 2,657 | 3,660 | 5,748 | 5,882 | 6,719 |
| Jet Fuel | 1,539 | 1,690 | 1,708 | 2,086 | 3,345 | 4,423 | 4,794 |
| LPG and Ethane | 30 | 38 | 45 | 53 | 102 | 95 | 105 |
| Lubricants | 786 | 818 | 928 | 965 | 1,324 | 1,438 | 1,539 |
| Motor Gasoline | 30,525 | 32,443 | 34,362 | 38,607 | 52,754 | 57,992 | 62,975 |
| Residual Fuel | 273 | 343 | 339 | 464 | 984 | 1,033 | 1,253 |
| Electricity | 32 | 35 | 37 | 39 | 57 | 73 | 81 |
| **Total Energy** | 82,233 | 89,449 | 97,459 | 111,445 | 153,074 | 171,391 | 192,525 |
| Primary Energy — Four Sectors | 58,745 | 63,078 | 67,638 | 77,544 | 110,341 | 120,515 | 135,258 |
| Electricity | 23,488 | 26,371 | 29,821 | 33,901 | 42,733 | 50,876 | 57,267 |
| **Electric Utility Sector** | 4,321 | 5,453 | 6,466 | 8,210 | 17,134 | 17,555 | 19,060 |
| Coal | 2,240 | 2,639 | 2,975 | 3,875 | 8,766 | 8,304 | 8,402 |
| Natural Gas | 1,148 | 1,283 | 1,353 | 1,290 | 1,736 | 2,436 | 3,256 |
| Petroleum Products | 886 | 1,453 | 2,049 | 2,837 | 6,360 | 6,346 | 6,861 |
| Distillate Fuel | 86 | 153 | 210 | 242 | 597 | 456 | 518 |
| Jet Fuel | — | — | 81 | 63 | 69 | 43 | 60 |
| Petroleum Coke | 15 | 15 | 18 | 12 | 17 | 2 | 3 |
| Residual Fuel | 785 | 1,285 | 1,742 | 2,519 | 5,676 | 5,845 | 6,300 |
| Nuclear | 44 | 78 | 105 | 195 | 270 | 466 | 539 |
| Wood and Waste | 3 | 2 | 3 | 3 | 2 | 2 | 3 |
| **Primary Energy — Five Sectors** | 63,066 | 68,531 | 74,123 | 85,754 | 127,475 | 138,070 | 154,338 |

– = no consumption.
(*) = number less than 0.5 rounded to zero.
Note: Totals may not equal sum of components due to independent rounding.
Note: There are no purchased fuels for energy sources such as hydroelectric, solar, wind, and geothermal power.
Note: Wood and other biomass fuels are not included except those consumed by the electric utility sector.

## Expenditures for Fuels and Electricity by Sector, 1977-1982, United States (Million Dollars)

| Sector and Energy Source | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
|---|---|---|---|---|---|---|
| **Residential Sector** | **47,641** | **51,827** | **57,559** | **68,886** | **78,095** | **86,540** |
| Primary Energy | 21,442 | 22,712 | 25,807 | 30,373 | 33,293 | 36,940 |
| Coal | 211 | 219 | 183 | 187 | 243 | 259 |
| Natural Gas | 11,351 | 12,477 | 14,708 | 17,521 | 18,564 | 23,995 |
| Petroleum Products | 9,880 | 10,016 | 10,916 | 12,685 | 13,486 | 12,687 |
| Distillate Fuel | 6,630 | 6,938 | 7,848 | 9,267 | 9,999 | 8,957 |
| Kerosene | 633 | 617 | 745 | 850 | 899 | 986 |
| LPG and Ethane | 2,617 | 2,460 | 2,323 | 2,568 | 2,588 | 2,743 |
| Electricity | 26,199 | 29,115 | 31,752 | 38,513 | 44,802 | 49,600 |
| **Commercial Sector** | **30,947** | **34,134** | **38,326** | **47,447** | **56,029** | **61,709** |
| Primary Energy | 9,606 | 10,332 | 13,327 | 16,462 | 18,054 | 19,678 |
| Coal | 142 | 165 | 145 | 120 | 152 | 191 |
| Natural Gas | 5,098 | 5,823 | 7,615 | 8,857 | 10,069 | 12,632 |
| Petroleum Products | 4,366 | 4,344 | 5,566 | 7,485 | 7,832 | 6,855 |
| Distillate Fuel | 2,040 | 2,117 | 2,632 | 3,382 | 3,683 | 3,445 |
| Kerosene | 154 | 173 | 377 | 263 | 539 | 228 |
| LPG and Ethane | 324 | 322 | 250 | 297 | 327 | 328 |
| Motor Gasoline | 515 | 563 | 741 | 1,037 | 997 | 912 |
| Residual Fuel | 1,332 | 1,169 | 1,566 | 2,507 | 2,287 | 1,942 |
| Electricity | 21,341 | 23,801 | 25,000 | 30,985 | 37,976 | 42,031 |
| **Industrial Sector** | **54,329** | **59,266** | **75,468** | **91,060** | **102,288** | **98,162** |
| Primary Energy | 35,313 | 37,401 | 50,598 | 62,211 | 68,588 | 63,005 |
| Coal | 5,141 | 5,508 | 5,870 | 5,623 | 6,126 | 5,084 |
| Coking Coal | 3,564 | 3,686 | 3,903 | 3,743 | 3,815 | 2,656 |
| Steam Coal | 1,577 | 1,821 | 1,966 | 1,881 | 2,312 | 2,429 |
| Natural Gas | 8,472 | 9,061 | 11,558 | 15,868 | 19,839 | 19,819 |
| Petroleum Products | 21,652 | 22,431 | 32,931 | 40,852 | 42,675 | 38,169 |
| Asphalt and Road Oil | 2,065 | 2,471 | 2,977 | 3,543 | 4,157 | 3,514 |
| Distillate Fuel | 4,481 | 4,817 | 6,760 | 7,356 | 9,141 | 8,339 |
| Kerosene | 420 | 463 | 861 | 1,144 | 838 | 1,037 |
| LPG and Ethane | 3,849 | 3,755 | 6,744 | 8,071 | 8,851 | 9,642 |
| Lubricants | 1,784 | 1,956 | 2,572 | 3,013 | 3,381 | 3,132 |
| Motor Gasoline | 1,004 | 936 | 1,141 | 1,530 | 1,726 | 1,435 |
| Residual Fuel | 3,467 | 2,977 | 3,901 | 4,219 | 4,111 | 3,942 |
| Other Petroleum Products | 4,582 | 5,037 | 7,975 | 11,977 | 10,470 | 7,127 |
| Net Imports of Coal Coke | 47 | 401 | 241 | -132 | -52 | -67 |
| Electricity | 19,016 | 21,865 | 24,870 | 28,849 | 33,700 | 35,157 |
| **Transportation Sector** | **86,315** | **92,538** | **123,059** | **163,799** | **183,925** | **173,250** |
| Primary Energy | 86,233 | 92,453 | 122,953 | 163,671 | 183,779 | 173,085 |
| Coal | (*) | — | — | — | — | — |
| Petroleum Products | 86,233 | 92,453 | 122,953 | 163,671 | 183,779 | 173,085 |
| Aviation Gasoline | 454 | 504 | 664 | 880 | 893 | 772 |
| Distillate Fuel | 8,156 | 9,089 | 14,512 | 19,894 | 24,556 | 22,696 |
| Jet Fuel | 5,759 | 6,519 | 9,087 | 14,770 | 15,604 | 14,955 |
| LPG and Ethane | 118 | 94 | 52 | 91 | 129 | 183 |
| Lubricants | 1,685 | 1,847 | 2,430 | 2,845 | 3,193 | 2,959 |
| Motor Gasoline | 68,529 | 72,903 | 93,284 | 120,744 | 134,392 | 127,596 |
| Residual Fuel | 1,530 | 1,496 | 2,923 | 4,446 | 5,011 | 3,923 |
| Electricity | 82 | 86 | 106 | 128 | 146 | 165 |
| **Total Energy** | **219,231** | **237,765** | **294,412** | **371,192** | **420,338** | **419,661** |
| Primary Energy — Four Sectors | 152,564 | 182,898 | 212,684 | 272,717 | 303,714 | 292,708 |
| Electricity | 66,638 | 74,866 | 81,728 | 98,475 | 116,624 | 126,953 |
| **Electric Utility Sector** | **23,935** | 544<br>~~**26,644**~~ | **30,989** | **37,057** | **43,215** | **41,292** |
| Coal | 10,287 | 12,296 | 13,710 | 16,084 | 19,356 | 20,632 |
| Natural Gas | 4,198 | 4,673 | 6,281 | 8,342 | 10,488 | 11,213 |
| Petroleum Products | 8,702 | 8,673 | 10,046 | 11,441 | 11,926 | 7,774 |
| Distillate Fuel | 766 | 687 | 709 | 907 | 852 | 599 |
| Jet Fuel | 100 | 75 | 78 | 67 | 32 | 19 |
| Petroleum Coke | 4 | 10 | 12 | 14 | 4 | 5 |
| Residual Fuel | 7,833 | 7,900 | 9,249 | 10,452 | 11,038 | 7,151 |
| Nuclear | 743 | 911 ~~[illegible]~~ | 942 | 1,182 | 1,439 | 1,669 |
| Wood and Waste | 5 | 4 | 8 | 8 | 5 | 4 |
| **Primary Energy — Five Sectors** | **176,529** | 442<br>~~**209,542**~~ | **243,673** | **309,775** | **346,929** | **334,000** |

— = no consumption.
(*) = number less than 0.5 rounded to zero.
Note: Totals may not equal sum of components due to independent rounding.
Note: There are no purchased fuels for energy sources such as hydroelectric, solar, wind, and geothermal power.
Note: Wood and other biomass fuels are not included except those consumed by the electric utility sector.

# Effects of Lower World Oil Prices

Prepared by:
Paul F. Dickens III
William P. Curtis
Jon Rasmussen
William Trapmann

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# Preface

The purpose of this report is to explore some of the effects of lower world oil prices on energy markets and the implications of lower oil prices for the larger economy. EIA is authorized to conduct studies of this kind by the Department of Energy Organization Act (P.L. 95-91). The report should be of interest to Federal policymakers and to decisionmakers and forecasters in the private sector. Questions concerning the content of this report should be addressed to Paul Dickens, (202) 252-5243, or to John D. Pearson, (202) 252-1197, Director, Longer-Term Information Division, Office of Energy Markets and End Use.

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# Executive Summary

By the end of 1980, the world oil price was over $39 a barrel (in 1982 dollars), up from about $6 in 1973. The people of the United States and other oil importing nations responded to the oil price increases of the 1970's with increases in general energy efficiency and, where possible, substitution of alternative fuels for oil.

By 1982, world oil markets had become relatively competitive with the enactment of U.S. oil decontrol and the increased production world wide from oil fields outside the sphere of OPEC control. The resulting market situation was best characterized by excess production capacity and declining real prices. The observed price decline raises questions about the effects of continued declines in world oil prices. Is it likely that the increases in energy efficiency observed in the recent past will be eroded, or that the substitution of other forms of energy for oil will be reversed?

By using the middle world oil price case and the low world oil price case prepared for the 1982 Annual Energy Outlook and supporting analyses, some indication may be obtained. The middle world oil price case assumes oil prices (in 1982 dollars) will fall until 1985 and rise thereafter (to $37 by 1990), while the low price case assumes prices reach a level of $21 in 1985-86 and rise slowly to $28 by 1990. Both cases project continued gains in the energy/GNP ratio, a measure of energy efficiency, and increased reliance on coal and nuclear power, which account for an increased share of gross energy supply and consumption. The oil price of $21 (1982) per barrel in 1986 is still 2.5 times the 1973 price.

Because of the Annual Energy Outlook assumption that the Natural Gas Policy Act (NGPA) will not be modified and that natural gas contracts will not be renegotiated, these forecasts contain a relatively high natural gas price. The result, in both the middle and low world oil price cases, would be switching from gas to low-sulfur residual fuel oil, particularly by electric utilities. Projected oil imports rise from a 1982 level of 4.2 million barrels per day to 9.5 million barrels per day by 1990 in the low case and 8.7 in the middle price case.

It should be noted that an alternate assumption (competitively priced natural gas) would have an impact on the estimation of oil imports. The possibility exists that competitively priced natural gas could halt and even reverse the fuel switching trend and thus eliminate 1.5 million barrels of oil per day from the increase otherwise projected by this report. Such a change, though significant, would not alter the economic and industry trends identified in this report.

As might be expected, projected drilling activity, particularly in the onshore areas of the Lower-48 States, is strongly affected by the difference in oil prices between the middle and low price cases. By 1990, projections of cumulative exploratory drilling are 41 percent lower in the low price case than in the middle price case. Cumulative reserve additions through 1990 are 37 percent lower in the low price case. Since production is largely a function of total reserves available, it is not strongly affected within the time horizon of the projections. Cumulative, projected oil production is 6 percent lower in the low price case. Because projected cumulative reserve additions are lower by 1990, however, production beyond 1990 may be severely affected. These projections are dependent upon the assumption of no-change in the existing windfall profits tax law which, by design, has the effect of reducing oil company profits and thus provides a negative impact on exploratory drilling and reserves development.

Despite the higher import levels in the low price case, the difference in prices reduces the level of the oil import bill. As a result of price and trade effects, the amount of GNP growth due to energy is somewhat more rapid (projected GNP growth is 3.7 percent per annum, 1982-87, in the low case and 3.4 percent in the middle case) and the unemployment level somewhat less than in the low case. Although Windfall Profit Tax receipts are somewhat lower in the low world oil price case, the effect on the budget deficit of lower oil prices is a small overall improvement because enhanced economic performance more than offsets the change in the receipts.

# Introduction

By the end of 1980, the world oil price was over $39 a barrel, (in 1982 dollars) up from about $8 in 1973. The people of the United States and other oil importing nations responded to the oil price increases of the 1970's with increases in general energy efficiency and substitution, where possible, of alternative fuels for oil. In the United States, the ratio of gross energy used per dollar of Gross National Product (a measure of energy intensity) fell by 14 percent between 1973 and 1980, while energy use per capita declined by 4 percent over the same period. Even more dramatically, the ratio of oil used to GNP fell 17 percent and use of oil per capita declined 7 percent during the period 1973 to 1980.

By 1982 world oil markets had become more competitive with the enactment of oil price decontrol in the United States and increased production from nations outside of OPEC. At year's end, world oil production capacity exceeded consumption by 9-10 million barrels a day. Liquidation of inventories helped soften world oil prices, which drifted downward to about $33 per barrel in December 1982 and $28 by March 1983.

The declines in world oil prices since the 1981 peak raise questions about the potential effects of declines in the price of oil. Is it likely that the increases in energy efficiency observed over the past few years will be lost or eroded? Will the substitution of other forms of energy (coal, for example) for oil be reversed?

This report attempts to explore some of the effects of oil price declines using projections prepared for the recent 1982 Annual Energy Outlook. The focus will be on the projections employing the lowest of three projected world oil price paths. The topics addressed are:

- The general level of energy use
- Changes in the relative use of energy forms
- Effects on the domestic oil production and producers
- Effects on the general economy and the Federal budget.

## World Oil Price Projections

The three world oil price projections prepared for the 1982 Annual Energy Outlook are shown in Table 1. These forecasts are based on extensive analysis of world oil markets and reflect the recent declines in price. The high price case reflects relatively high estimates of world oil demand and less optimistic supply assumptions while the low price case represents lower demand assessments and more favorable supply conditions. Note that all three of the paths contain projected declines in the world oil price. The difference between them lies in how long the decline will continue and the amount by which the price falls.

Table 1. World Oil Price: History and Projections
(1982 dollars per Barrel)

| Price | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|
| Low ...... | 34 | 28 | 23 | 21 | 21 | 22 | 24 | 26 | 28 |
| Middle ... | 34 | 30 | 26 | 25 | 28 | 32 | 34 | 36 | 37 |
| High ..... | 34 | 32 | 30 | 34 | 38 | 41 | 43 | 45 | 48 |

## Domestic Energy Markets Under the Low World Oil Price Assumption

In the low world oil price case, the price is projected to fall to $21 (1982 dollars) by 1985-86. This is about 54 percent of the 1980 peak and about one-third below the 1982 price. It is important to note, however, that even this lowest price is still 2.5 times the price ($8 in 1982 dollars) that prevailed in 1973. This, together with projected increases in the prices of other forms of energy, has two major implications in the projections. First, the general level of prices remains high enough so that the incentives to continue increases in energy efficiency are not lost. As a result the projected energy/ GNP ratio declines by nearly 16 percent by 1990 from the 1980 level, while per capita energy use is nearly constant. There are, however, important changes in the relative prices of oil and some other energy sources in the projections that result in substantial changes. These effects are common to both the middle and low world oil price cases, although there are differences in magnitude.

The projections contained in the forecasts prepared for the 1982 Annual Energy Outlook are based on the statutes and regulations currently in place. The forecast of natural gas prices, therefore, reflects the pricing provisions of the NGPA and the removal of price ceilings on about half of the natural gas production in 1985. It is also assumed that little renegotiation of natural gas contracts will occur. In combination, these assumptions yield a projection of sharply rising natural gas prices at a time when the projected price of oil is declining.

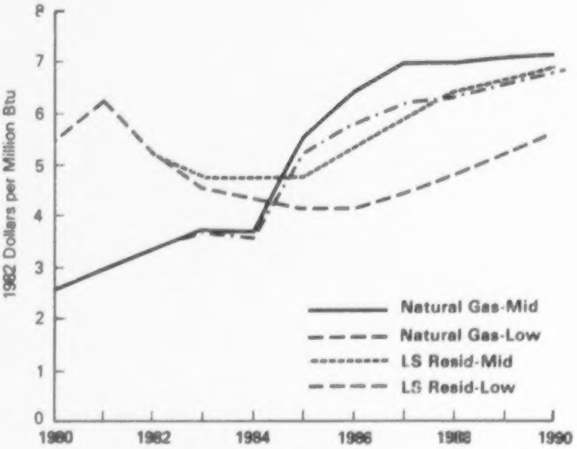
Not all sectors of the economy find it easy to move from one type of fuel to another. Few home furnaces, for example, can burn more than one fuel. However, a great many electric utility plants can burn either natural gas or residual fuel oil and will, in fact, switch between them depending on the season and market conditions. Relative prices will determine, to a large extent, consumption patterns in the sectors that can switch.

By 1985, the projected average price of low-sulfur residual fuel oil to electric utilities in the low price forecast is only about 60 percent of the projected price of natural gas (see Figure 1). In this situation, the projected consumption of residual fuel oil by utilities increases rapidly, by about 2 quadrillion Btu a year (or 1 million barrels of oil a day) by 1985. About three-quarters of this shift comes from changing fuels in dual-fired plants located largely in the Southwest and West. The rest of the change results from the use of oil-fueled plants more intensively and gas-fueled plants at lower utilization rates as oil plants become (relatively) cheaper to run. It should be noted, however, that the

Figure 1.

### Utility Natural Gas and Residual Fuel Oil Prices, 1980 to 1990

**(1982 Dollars per Million Btu)**



Source: Historical Data: Energy Information Administration, State Energy Data Report, 1960 through 1980, DOE/EIA-0214 (80) (Washington, D.C., 1982), Monthly Energy Review, DOE/EIA-0035 (83/2) (Washington, D.C., 1983) and 1982 Annual Energy Outlook, DOE/EIA-0383 (82) (Washington, D.C., 1983).

degree of switching projected is much higher than has been observed in the past, as is the magnitude of change in relative prices. The difference in the quantity of fuel switching between the middle and low price cases is relatively small because even in the middle price case utilities can operate at lower cost by burning oil once gas prices are higher than oil prices. The increase in utility oil consumption between the middle and low price cases is about 150,000 barrels per day in 1986, rising to nearly half a million barrels per day by 1990 as the oil price assumptions become further apart.

The industrial sector is the other consuming sector with substantial ability to change fuels rapidly. A recent EIA survey (DOE/EIA-0358) identified about one-half million barrels per day of capacity in large industrial boilers which can burn either oil or gas. In 1979, about 80 percent of the fuel used in these boilers was natural gas. Since there are also smaller boilers with dual fuel capability, a swing of more than one-half million barrels per day in oil consumption as gas prices rise and oil prices fall is possible.

Interfuel substitution due to lower oil prices is, however, largely limited to the substitution of oil for gas in both cases. Coal remains far cheaper than low-sulfur residual fuel oil (less than one-third as much on a Btu basis) and the operating costs of nuclear powerplants are also much less. The relative share of electricity generation projected from nuclear plants is projected to rise from 13 to nearly 20 percent by 1990, while coal is projected to continue to provide over 50 percent of generation. The absolute level of coal generation is projected to be about one-third higher than the 1980 level. The combined share of oil and gas generation falls from about 25 percent of the total in 1982 to 20 percent by 1990.

## Imports

The degree of fuel switching projected in both the middle and low price cases exerts a strong influence on the projected level of imports. If the switching occurs (the lower price of residual fuel oil in the low price case makes it likely over a wider range of natural gas prices), then the additional oil used will be largely from foreign sources. Oil imports may be expected to increase in any case from the 1982 level of 4.2 million barrels per day as the economy recovers from the recent recession. The greater attractiveness of low-sulfur residual oil for utility and boiler use would also cause a substantial increase in the projected quantity of imported oil.

In the low world oil price case, projected net imports rise to 8.7 million barrels per day (about twice the 1982 level) by 1985 and to 9.5 million barrels per day in 1990. In the middle price case (which also contains switching from gas to oil), the equivalent projections are 7.6 million barrels per day in 1985 and 7.1 million in 1990. It should be noted, however, that an alternative assumption about natural gas pricing would have an impact upon the estimation of oil imports. If gas were competitively priced in boiler and utility markets, fuel switching may be halted or reversed. Projected imports would then be 1.5 million barrels per day less. Although significant, this change would not alter the other trends identified in this report.

### Other Changes in Consumption

Table 2 presents the projected sources of supply for the middle and low world oil price cases for selected years. There is a generally lower average price of energy in the low price case and slightly larger net consumption of energy. There is also a somewhat greater than proportional expansion of projected consumption of petroleum, since there is some degree of substitution of oil for other fuels based on the relative prices. Within the range of prices underlying the two projections, there is, however, relatively little change in the composition or amount of energy used. This occurs because the most striking result of moderately falling oil prices, the substitution of oil for gas in the utilities sector, is projected to occur in either case.

The differences in the world oil price paths cause only minor changes in the consumption of coal. Utility coal consumption is virtually unaffected, while industrial coal consumption is about 6 percent less in the low price projection.

## Financial Effects on the Petroleum Industry

The second major surge in crude oil prices, beginning in 1979 and continuing through the first quarter of 1981, greatly increased the profitability of major U.S. petroleum companies and domestic oil and gas producers (see Figure 2). As shown in Table 3, profit rates of these companies were much higher than those of U.S. industry generally in the 1979-81 period. Under the pressure of falling crude oil prices in the last 9 months of 1981, profitability of the majors and domestic producers declined but remained noticeably above that of large industrial companies as a whole. The further decline in crude oil prices in 1982 (though not of the magnitude of the declines in 1981), together with recessionary pressures, further lowered the profitability of the majors and oil and gas producers. By 1982, the differences in profitability between the majors and industry generally were smaller, while the profit rate of oil and gas producers actually fell below that of other large industrial companies (see Table 3). With a resumption of economic growth and stable or even slightly declining crude oil prices expected in 1983 and 1984, the returns to the majors may be expected to be about equal to that of other large industrial companies.

Table 2. Sources of U.S. Energy Supply
(Quadrillion Btu Per Year)

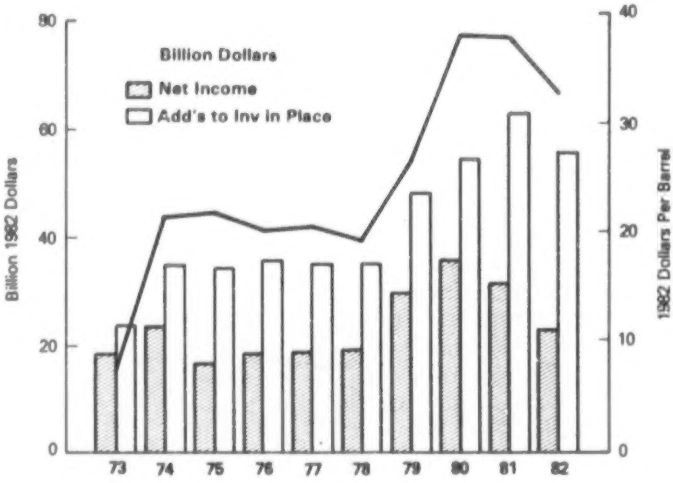
| | 1980 | 1985 | | 1990 | |
|---|---|---|---|---|---|
| | | Low | Middle | Low | Middle |
| Supply | | | | | |
| Production | | | | | |
| Petroleum | 20.5 | 20.1 | 20.4 | 18.2 | 19.3 |
| Natural Gas | 20.1 | 14.9 | 15.2 | 15.3 | 16.4 |
| Coal | 19.2 | 20.3 | 20.3 | 23.7 | 23.9 |
| Nuclear | 2.7 | 4.1 | 4.1 | 6.3 | 6.3 |
| Other | 3.0 | 3.1 | 3.1 | 3.2 | 3.2 |
| Imports | | | | | |
| Oil and Oil Products | 13.5 | 18.4 | 16.1 | 20.1 | 15.1 |
| Natural Gas | 1.0 | 1.2 | 1.2 | 1.2 | 1.2 |
| Other Gas | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Coal | -2.4 | -2.9 | -2.9 | -3.8 | -3.8 |
| Electricity | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 |
| SPR Additions | -0.1 | -0.3 | -0.3 | -0.3 | -0.3 |
| Stock Withdrawals | -1.8 | - | - | - | - |
| Total Supply | 75.9 | 79.4 | 77.6 | 84.4 | 81.7 |

Source: Energy Information Administration, 1982 Annual Energy Outlook, DOE/EIA-0383(83) (Washington, D.C., April 1983, Tables A1.1 and B1.1.

Figure 2.

## Refiner Acquisition Cost, Profits of Petroleum Firms and Additions to Investment in Place, 26 Major Energy Companies

Imported Crude



Source: Refiner Acquisition Cost of imported crude oil-- Energy Information Administration, 1982 Annual Energy Review DOE/EIA-0384, (Washington, D.C., 1983) p.91. Net Income and Investment--Energy Information Administration, Energy Company Development Patterns in the Postembargo Era, DOE/EIA-0349/2 (Washington, D.C., 1983), p.3., Energy Information Administration, Performance Profiles of Major Energy Producers, 1981, p. 130, Standard and Poor's Compustat Services Inc.

Table 3. Return on Equity
(Percent)*

| | 1978 | 1979 | 1980 | 1981 | 1982 |
|---|---|---|---|---|---|
| Petroleum Firms | | | | | |
| Majo: Integrated | 13.2 | 18.7 | 21.5 | 18.2 | 13.3 |
| Oil and Gas Producers | 7.8 | 19.3 | 20.1 | 17.0 | 9.1 |
| Refiner/Marketers | 14.9 | 24.8 | 19.6 | 11.9 | 13.6 |
| S&P 400 | 14.3 | 16.0 | 14.7 | 14.2 | 10.6 |

* Net Income/Stockholders' Equity
Source: Standard and Poor's Compustat Services Inc.
Note: For a list of firms included in each class of firms, see Appendix A.

Table 4. Capital Expenditures
(Billion Dollars)

| | 1978 | 1979 | 1980 | 1981 | 1982 |
|---|---|---|---|---|---|
| Petroleum Firms | | | | | |
| Major Integrated | 20.0 | 31.8 | 39.3 | 49.7 | 45.9 |
| Oil and Gas Producers | 2.6 | 4.8 | 6.5 | 11.0 | 6.3 |
| Refiner/Marketers | 2.1 | 2.2 | 3.1 | 4.0 | 3.6 |
| S&P 400 | 99.0 | 134.3 | 154.9 | 177.6 | 150.3 |

Source: Standard and Poor's Compustat Services Inc.

Although the major energy companies produce gas as well as crude oil and are generally diversified beyond energy production, their earnings and investments are largely conditioned by the general level of crude oil prices. As Figure 2 indicates, there is a clear association between the real level of world crude oil prices and the real level of profits and investment of 26 major energy companies.* The majors are relatively specialized in petroleum (oil and gas production, refining/marketing, and transport). In 1981, almost 95 percent of their net income was derived from petroleum operations and 74 percent of their investment was directed toward petroleum.**

In the low world oil price case, with a further drop in world crude oil prices, profitability of domestic oil companies will likely drop below that of U.S. industry generally. Because corporate income tax liabilities and Windfall Profit Tax (WPT) collections vary with revenues, changes in gross revenues do not cause dollar for dollar changes in after tax income. As prices change, WPT collections change more than proportionately. Changes in WPT and corporate tax liabilities reduce the impact of revenue changes on profits.***

Domestic refinery operations will benefit from the price decrease as processing margins improve and the demand for petroleum products rises. Margins, the spread between selling prices and cost per barrel of product sold, may improve since crude input costs comprise nearly 70 percent of the price of refined products.

The projected demand for natural gas will be diminished as projected lower oil prices induce some substitution of other fuels for natural gas. The consequent decrease in projected natural gas production will only average about 4 percent over the 1983-90 period. However, even with the slight drop in demand, stemming from lower crude oil prices, natural gas prices and revenues are projected to increase at an annual rate in excess of 10 percent (adjusted for inflation) over the 1983-90 span through the workings of the NGPA and its provisions for ultimate decontrol.

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*The simple correlation between the crude oil price and investment shown in Figure 2 is .96, while the simple correlation between the crude oil price and net income is .78. The 26 major energy companies report to DOE's Financial Reporting System and are listed in Appendix A.

**Energy Information Administration, Performance Profiles of Major Energy Producers 1981, DOE/EIA-0206(81) (Washington, D.C., June 1983), p. 139.

***The relative impact on producers revenue declines will be increased over time as more production falls under the lower-taxed new oil tiers, the base price increases, and Tier 3 WPT tax rates are lowered according to legislated schedules.

Table 5. Long-Term Debt As a Proportion of Stockholders' Equity
(Percent)

| | 1978 | 1979 | 1980 | 1981 | 1982 |
|---|---|---|---|---|---|
| Petroleum Firms | | | | | |
| Major Integrated | 36.5 | 33.2 | 31.9 | 31.5 | 32.0 |
| Oil and Gas Producers | 68.8 | 73.5 | 79.3 | 117.5 | 112.0 |
| Refiner/Marketers | 75.9 | 66.7 | 61.3 | 64.7 | 63.2 |
| S&P 400 | 39.4 | 38.0 | 38.3 | 40.0 | 41.3 |

Source: Standard and Poor's Compustat Services, Inc.

Table 6. Interest and Finance Charges As a Proportion of Net Income
(Percent)

| | 1978 | 1979 | 1980 | 1981 | 1982 |
|---|---|---|---|---|---|
| Petroleum Firms | | | | | |
| Major Integrated | 27.8 | 18.3 | 17.8 | 26.7 | 35.8 |
| Oil and Gas Producer | 91.4 | 43.6 | 46.8 | 83.6 | 189.3 |
| Refiner/Marketers | 49.4 | 30.7 | 40.1 | 81.6 | 64.8 |
| S&P 400 | 29.4 | 27.8 | 35.7 | 43.0 | 61.2 |

Source: Standard and Poor's Compustat Services, Inc.

Investment in upstream petroleum increased sharply in the 1979-81 period but began to diminish in 1982 as downward pressures on real crude prices, which began in the second quarter of 1981, continued through 1982 (see Table 4). Much of the decrease in exploratory activity evident in the past 15 months appears to have been the result of marginal drilling operators exiting the industry. With a few exceptions, major firms are currently no more leveraged than they were in 1978 (see Tables 5 and 6). However, independent oil and gas producers' debt and interest burden virtually doubled during the drilling boom of 1979-81. With further declines in crude oil prices, some of the most highly leveraged producers may exit the industry. Withdrawals from the industry typically involve the sale of properties and equipment to remaining producers.

A further drop in crude prices will further decrease incentives for exploration and development activity. Two recent developments should moderate these disincentives. First, considerable excess capacity in the oil field services industry developed subsequent to the unprecedented surge in drilling activity in the 1979-81 period. As a result, contract drilling prices have declined on the order of 50 percent over the past year or so, a development which, in itself, can enhance the profitability of drilling activity for producing companies. Second, the potentially large discoveries recently evident in offshore California locales and the optimism attending acreage sales in Alaska and the Gulf of Mexico bode well for longer term development of the U.S. oil and gas reserve base.

## Drilling Activity and Reserve Additions

As one would expect, projections of domestic oil industry activity are more strongly affected by the differences between the middle and low world oil price cases than is the general pattern of energy consumption and production. The effects are stronger on projected drilling activity and reserve additions in the Lower-48 States than on projected production of oil and the development of frontier areas.

The lower oil prices in the low price case have a dual impact. The reduction in the price per barrel of oil reduces the expected revenues and the net present value of drilling projects. Moreover, some projects that would have been marginally profitable with higher world oil prices are uneconomic with lower prices. Lower prices thus tend to reduce drilling activity. This effect may be most pronounced in mature areas where there is little likelihood of major finds because the most promising prospects have already been brought into production.

At the same time, however, reduction in drilling activities may not be as severe as would appear on the basis of changes in expected revenues alone, because reduced activity would likely reduce the demand for drilling supplies and hence the cost of drilling a well. Some projects initially made unprofitable by lower prices may again become attractive if drilling costs fall enough.

Because exploration and development projects in the frontier areas (e.g., new offshore fields or new Alaskan finds) take a very long time to bring to production, short-term fluctuations in the price of oil would not have as large an impact on projections of these activities as upon onshore lower-48 activity. For this reason there is no variation in activity levels through 1990 between the low price case projections and the middle world oil price case. The discussion below will focus on the more sensitive onshore lower-48 production areas.

The effects of lower world oil price are immediately apparent in estimates of lower-48 activities that are associated with the 1982 Annual Energy Outlook cases. Even in the middle world oil price case, which contains moderate declines in price through 1985 and prices about the same level as 1980 prices by 1990, oil exploratory drilling is estimated to decline to about 90 percent of the 1980 level of 30.3 million feet per year by 1985. The low price case results in even lower estimates; 1985 exploratory drilling levels decline to 43 percent of the 1980 level by 1985. Cumulative oil exploratory drilling is 41 percent lower through the 1980's in the low price case estimates than in the middle price case. These results depend upon the assumption that the structure of the WPT is unchanged.

Estimates of oil reserve additions, largely the fruit of exploratory drilling, are also strongly affected by the difference in price trajectories. The low price case results in projections of reserve additions 37 percent below the level in the middle price case. The fact that the projected reserve additions decrease less than the projected exploratory footage reflects the proposition that the least likely drilling prospects are frozen out first so that the efficiency of drilling activities would be expected to increase as the amount of drilling declines. As a result, projected success rates increase with lower oil prices.

Developmental drilling activities are arguably less risky than exploration and hence less susceptible to fluctuation in price. Projected cumulative development oil drilling differs by only 13 percent between the middle and low price cases through 1990.

Actual oil production is largely determined by the total oil reserves available. Accordingly, production is less sensitive to smooth changes in price than either drilling activity or reserve additions. In both the low and middle price cases, projected oil production from the Lower-48 States peaks in 1983. Levels of projected production decline by 1990 in both cases (by 3.6 percent in the middle price case and by 6.6 percent in the low price case) from the projected 1983 peak. By 1990, cumulative production is 6 percent lower in the low price case than the middle price case.

Examination of these detailed projections indicates a modest decline in production, a somewhat higher rate of decline in reserve additions (additions to the stock of oil producible in the future), and a sharp decline in the level of exploratory drilling.

## Economic Impacts of Lower Oil Prices

Because the energy sector is a relatively large part of the U.S. economy, the lower oil prices projected in the low oil price case may lead to significant economic differences between the low and middle world oil price cases. Most of these changes may be regarded as beneficial. Changes are traceable to direct effects on the economy through costs and changes in the trade balance and to indirect effects through changes in Federal tax receipts (in particular, lowered Windfall Profit Tax collections). As EIA does not maintain macroeconomic models, estimates of the direction and magnitude of the effects were obtained from a model maintained by Data Resources, Inc. (DRI).

The values of energy variables underlying the macroeconomic results are outlined in Table 7 and are based on the projections in the 1982 Annual Energy Outlook, in combination with inflation, mark-up, and other assumptions needed to link with the DRI U.S. economy model. Also employed as an input to the macroeconomic analysis were projections of Windfall Profit Tax receipts for each case, discussed in the section immediately following.

Oil prices in the low price case are approximately $4.40 per barrel lower than the middle price case by 1985, in real terms, and about $9.10 per barrel lower by 1990 (again in 1982 dollar prices). The basic inflation rate projected for the middle case is approximately 6 percent per year over 1982-90. In the low price case this rate is about 5.7 percent per year.

The lower world oil price, in isolation, would imply a smaller fuel import bill for the low price case. However, the low world oil price case also projects imports of oil to be higher, by 1 million barrels per day in 1985 and 2 million barrels per day by 1990. The increased imports offset about half of the import bill savings associated with the lower price. The peak differences between the middle and low price cases are reached in 1986, when the fuel import bill is $9.4 billion less in the low price case ($83 billion in the low case, $92.4 in the middle price case).

As a result of the stimulation of lower inflation rates and lower oil import bills, projected real GNP climbs by as much as $48 billion by 1988 (in 1982 constant dollars) in the low price case relative to the middle price case. This is an increase of 1.3 percent. The most rapid acceleration in real GNP growth occurs in the first 5 years. In the 1982-87 period, growth climbs from 3.4 percent per annum in the middle price case to 3.7 percent in the low price case (see Table 8).

Beneficial effects on employment follow from this increase in real GNP. The unemployment rate drops from a projected rate of 7.7 percent in the middle price case in 1987 to 7.3 percent in the low price case in that year. The improvement is disseminated broadly throughout the economy, affecting consumer durables, housing, and business fixed investment. In 1987, the percentage increases above the middle price case for these components of real GNP are projected to be 4.8 percent, 3.2 percent, and 2.3 percent, respectively.

Table 7. Energy Inputs to Macroeconomic Analysis

| Case | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|
| | | | Real World Oil Price (1982 dollars per barrel) | | | | | | |
| Low | 33.59 | 27.77 | 23.28 | 21.08 | 20.99 | 22.30 | 24.00 | 26.20 | 27.60 |
| Middle | 33.59 | 29.54 | 25.82 | 25.47 | 28.24 | 31.53 | 34.11 | 35.68 | 36.71 |
| | | | Oil Imports, Gross (millions of barrels per day) | | | | | | |
| Low | 5.04 | 5.51 | 7.75 | 9.54 | 10.04 | 10.12 | 10.04 | 9.91 | 10.34 |
| Middle | 5.04 | 5.51 | 7.20 | 8.45 | 8.32 | 7.99 | 7.69 | 7.53 | 7.96 |
| | | | Gas Imports and Supplemental Gas (trillions of Btu/per year) | | | | | | |
| Low | 900 | 900 | 1,200 | 1,300 | 1,800 | 2,000 | 1,900 | 1,600 | 1,200 |
| Middle | 900 | 900 | 1,200 | 1,200 | 1,500 | 1,400 | 1,200 | 1,200 | 1,200 |
| | | | Wellhead Price of Natural Gas (1982 dollars per million Btu) | | | | | | |
| Low | 2.32 | 2.41 | 2.50 | 3.18 | 3.53 | 3.91 | 4.25 | 5.54 | 4.78 |
| Middle | 2.32 | 2.50 | 2.64 | 3.53 | 4.23 | 4.79 | 5.05 | 5.04 | 5.04 |

Table 8. Macroeconomic Impacts of Lower Oil Prices

| Case | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|
| Cost of Imports of Fuels and Lubricants (billion current dollars) | | | | | | | | | |
| Low | 66.2 | 62.1 | 76.2 | 89.1 | 99.9 | 113.7 | 129.0 | 147.0 | 170.1 |
| Middle | 66.2 | 66.2 | 79.3 | 96.5 | 113.1 | 129.1 | 143.1 | 156.6 | 180.6 |
| Differences[a] | 0.0 | -4.1 | -3.1 | -7.3 | -13.2 | -15.4 | -14.1 | -9.6 | -10.6 |
| Percent Change | 0.0 | -6.3 | -3.9 | -7.6 | -11.7 | -11.9 | -9.9 | -6.1 | -5.8 |
| Cost of Imports of Fuels and Lubricants (billion 1982 dollars) | | | | | | | | | |
| Low | 66.2 | 59.2 | 70.0 | 78.1 | 83.0 | 89.1 | 94.8 | 101.4 | 110.2 |
| Middle | 66.2 | 63.1 | 72.4 | 83.7 | 92.4 | 98.5 | 101.9 | 104.5 | 113.5 |
| Differences[a] | 0.0 | -3.9 | -2.5 | -5.6 | -9.4 | -9.4 | -7.0 | -3.0 | 3.3 |
| Percent Change | 0.0 | -6.2 | -3.4 | -6.7 | -10.2 | -9.6 | -6.9 | -2.9 | -2.9 |
| Real GNP (billion 1982 dollars)[b] | | | | | | | | | |
| Low | 3058 | 3121 | 3275 | 3422 | 3546 | 3667 | 3764 | 3856 | 3961 |
| Middle | 3058 | 3117 | 3265 | 3405 | 3514 | 3622 | 3717 | 3819 | 3937 |
| Differences[a] | 0 | 4 | 10 | 18 | 32 | 44 | 48 | 37 | 24 |
| Percent Change | 0.0 | 0.1 | 0.3 | 0.5 | 0.9 | 1.2 | 1.3 | 1.0 | 0.6 |
| Unemployment Rate (percent) | | | | | | | | | |
| Low | 9.7 | 10.6 | 9.4 | 8.2 | 7.7 | 7.3 | 7.3 | 7.4 | 7.4 |
| Middle | 9.7 | 10.6 | 9.4 | 8.3 | 7.9 | 7.7 | 7.6 | 7.6 | 7.4 |
| Rate of Growth in Real GNP, Year-to-Year Percent | | | | | | | | | |
| Low | -1.8 | 2.1 | 4.9 | 4.5 | 3.6 | 3.4 | 2.7 | 2.4 | 2.7 |
| Middle | -1.8 | 1.9 | 4.8 | 4.3 | 3.2 | 3.1 | 2.6 | 2.8 | 3.1 |
| Implicit GNP Price Deflator (1972=1.000), and Annual Rate of Change | | | | | | | | | |
| Low | 2.072 | 2.170 | 2.258 | 2.365 | 2.494 | 2.644 | 2.819 | 3.004 | 3.198 |
| Middle | 2.072 | 2.172 | 2.269 | 2.388 | 2.537 | 2.714 | 2.912 | 3.106 | 3.297 |
| Percent Change, Low | 6.0 | 4.7 | 4.0 | 4.8 | 5.4 | 6.0 | 6.6 | 6.6 | 6.5 |
| Percent Change, Middle | 6.0 | 4.8 | 4.5 | 5.2 | 6.2 | 7.0 | 7.3 | 6.7 | 6.2 |
| Real Consumption of Durables (billion 1982 dollars)[b] | | | | | | | | | |
| Low | 288 | 309 | 338 | 367 | 392 | 410 | 418 | 428 | 441 |
| Middle | 288 | 307 | 335 | 359 | 378 | 391 | 396 | 408 | 425 |
| Differences[a] | 0 | 2 | 4 | 7 | 14 | 19 | 22 | 20 | 16 |

Table 8 (Continued)

| Case | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Housing Starts (millions) | | | | | |
| Low | 1.060 | 1.456 | 1.681 | 1.905 | 1.926 | 1.950 | 1.930 | 1.863 | 1.806 |
| Middle | 1.060 | 1.452 | 1.670 | 1.882 | 1.890 | 1.865 | 1.808 | 1.763 | |
| Differences[a] | 0.000 | 0.003 | 0.011 | 0.023 | 0.041 | 0.060 | 0.064 | 0.055 | 0.043 |
| | | Real Fixed Business Investment (billion 1982 dollars) | | | | | | | |
| Low | 343 | 319 | 345 | 374 | 398 | 421 | 442 | 460 | 479 |
| Middle | 343 | 318 | 343 | 371 | 391 | 411 | 431 | 449 | 469 |
| Differences[a] | 0 | 1 | 2 | 3 | 7 | 10 | 11 | 11 | 9 |

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[a] Differences are defined as the low case values minus the middle case values. These differences may not correspond to the computed differences between middle and low case due to independent rounding.

[b] Current dollar values (in billions), deflated by the GNP deflator for each case, rebased to 1982=1.000.

## Impacts of Lower Oil Prices on the Government Budget

The impact of lower oil prices on the Federal budget is the aggregate of a number of different influences. Principal influences on the revenue side are:

- The impact on Windfall Profit Tax receipts
- The impact on inflation rates and personal income and thereby on both personal and payroll taxes
- The impact on corporate profits and corporate profit taxes, including the write-off of the Windfall Profit Tax receipts.

On the expenditure side, lower oil prices result in

- Lower direct Federal spending on petroleum products and other items whose cost is influenced by petroleum prices and inflation generally, including wages
- Lower spending on transfers and grants related to the general condition of the economy.

As is shown in Table 9, the direct effect of lower oil prices on gross receipts from the Windfall Profit Tax is quite significant, reducing projected cumulative gross receipts from $135.2 billion (current dollars) over the 1983-90 period in the middle price case to $61 billion over the same period in the low price case. However, it must be recognized that Windfall Profit Tax collections reduce the income of producers and hence their corporate income tax liabilities. The net effect on Federal receipts, then, is likely to be very much less, on the order of half of the change in Windfall Profit Tax receipts.

Changes in other tax and expenditure categories generally tend to mitigate the windfall tax revenue losses (see Table 10). Tax receipts from other sources fall by less than Federal expenditures throughout the forecast period. The fall in other tax receipts occurs despite greater economic growth, due to lower projected inflation rates. As a consequence, nominal revenues from personal and payroll taxes are lower with lower oil prices.

Net changes in Federal corporate tax revenues between the two cases are very small. The effects of lower corporate deductions for payments of Windfall Profits Taxes and lower inflation compensate for increases in profits due to higher economic growth. Federal receipts from other indirect businesses taxes also do not differ between the two cases (the Windfall Profit Tax is an indirect business tax).

Table 9. Windfall Tax Impacts of Lower Oil Prices

| Case | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|
| | Gross Windfall Profit Tax Receipts (billion current dollars) | | | | | | | | |
| Low | 16.8 | 10.8 | 5.0 | 2.5 | 2.5 | 3.8 | 5.3 | 7.1 | 7.2 |
| Middle | 16.8 | 13.2 | 8.3 | 7.8 | 11.8 | 16.3 | 19.6 | 21.1 | 20.3 |
| Differences | 0.0 | -2.5 | -3.3 | -5.3 | -9.4 | -12.5 | -14.3 | -14.1 | -13.1 |
| | Cumulative Windfall Tax Revenues (billion current dollars)[a] | | | | | | | | |
| Low | 16.8 | 27.6 | 32.6 | 35.1 | 37.6 | 41.4 | 46.8 | 53.9 | 61.0 |
| Middle | 16.8 | 30.0 | 38.3 | 46.1 | 57.9 | 74.2 | 93.9 | 114.9 | 135.2 |
| Differences | 0.0 | -2.4 | -5.7 | -11.0 | -20.3 | -32.8 | -47.0 | -61.1 | -74.2 |
| | Gross Windfall Profit Tax Receipts (billion 1982 dollars)[a] | | | | | | | | |
| Low | 16.8 | 10.3 | 4.6 | 2.2 | 2.0 | 3.0 | 3.9 | 4.9 | 4.7 |
| Middle | 16.8 | 12.6 | 7.6 | 6.8 | 9.7 | 12.5 | 13.9 | 14.1 | 12.7 |
| Differences | 0.0 | -2.3 | -3.0 | -4.6 | -7.6 | -9.5 | -10.0 | -9.2 | -8.1 |
| | Cumulative Windfall Tax Revenues (billion 1982 dollars)[a] | | | | | | | | |
| Low | 16.8 | 26.4 | 30.0 | 30.8 | 31.2 | 32.4 | 34.4 | 37.0 | 39.4 |
| Middle | 16.8 | 28.6 | 35.0 | 40.0 | 47.4 | 56.8 | 66.8 | 76.8 | 85.0 |
| Differences | 0.0 | -2.4 | -5.0 | -9.2 | -16.2 | -24.2 | -32.4 | -39.6 | -45.6 |

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[a] Cumulative since January 1, 1982, not since inception of tax.

Table 10. Fiscal Impacts of Lower Oil Prices

| Case | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|
| | | | Total Federal Receipts (billion current dollars) | | | | | | |
| Low | 614.3 | 637.7 | 701.6 | 785.4 | 867.0 | 972.1 | 1093.6 | 1202.2 | 1325.4 |
| Middle | 614.3 | 640.7 | 707.4 | 796.9 | 888.2 | 1003.2 | 1132.2 | 1244.5 | 1371.2 |
| Differences | 0.0 | -3.0 | -5.8 | -11.6 | -21.2 | -31.1 | -38.5 | -42.3 | -45.8 |
| | | | Total Federal Expenditures (billion current dollars) | | | | | | |
| Low | 762.6 | 837.9 | 910.6 | 982.1 | 1056.1 | 1138.4 | 1233.8 | 1341.3 | 1457.4 |
| Middle | 762.6 | 839.4 | 915.6 | 992.6 | 1076.8 | 1173.5 | 1281.4 | 1394.6 | 1511.2 |
| Differences | 0.0 | -1.5 | -5.0 | -10.5 | -20.7 | -35.1 | -47.5 | -53.3 | -53.9 |
| | | | Federal Deficit (billion current dollars) | | | | | | |
| Low | -148.4 | -200.2 | -209.0 | -196.8 | -189.1 | -166.3 | -140.2 | -139.1 | -132.0 |
| Middle | -148.4 | -198.7 | -208.3 | -195.7 | -188.5 | -170.3 | -149.2 | -150.0 | -140.0 |
| Differences | 0.0 | -1.5 | -0.8 | -1.1 | -0.5 | 4.0 | 9.0 | 10.9 | 8.0 |
| | | | Total Federal Receipts (billion 1982 dollars) | | | | | | |
| Low | 614.3 | 608.9 | 644.0 | 688.1 | 720.5 | 762.0 | 804.0 | 829.3 | 858.8 |
| Middle | 614.3 | 611.2 | 646.0 | 691.5 | 725.6 | 765.9 | 805.8 | 830.4 | 861.8 |
| Differences | 0.0 | -2.4 | -2.0 | -3.5 | -5.1 | -3.9 | -1.8 | -1.1 | -3.0 |
| | | | Total Federal Expenditures (billion 1982 dollars) | | | | | | |
| Low | 762.6 | 800.1 | 835.9 | 860.5 | 877.6 | 892.3 | 907.1 | 925.2 | 944.3 |
| Middle | 762.6 | 800.8 | 836.2 | 861.4 | 879.6 | 896.0 | 912.0 | 930.4 | 949.8 |
| Differences | 0.0 | -0.7 | -0.3 | -0.9 | -2.1 | -3.6 | -4.9 | -5.2 | -5.5 |
| | | | Federal Deficit (billion 1982 dollars) | | | | | | |
| Low | -148.4 | -191.2 | -191.9 | -172.4 | -157.1 | -130.4 | -103.1 | -95.9 | -85.5 |
| Middle | -148.4 | -189.5 | -190.2 | -169.8 | -154.0 | -130.1 | -106.2 | -100.1 | -88.0 |
| Differences | 0.0 | -1.6 | -1.7 | -2.6 | -3.1 | -0.3 | 3.1 | 4.2 | 2.5 |

On the expenditure side, lower inflation rates lead to lower expenditure levels. Since real spending is assumed not to change, this effect is more dramatic than the effect on receipts. An improved economy due to lower oil prices leads to lower transfer payments and grants-in-aid by the Federal Government. The projections, including Federal deficits for both cases, are shown in Table 10, in both constant and current 1982 dollars.

There is little difference in the Federal deficit until late in the forecast period, when reductions in Federal expenditures and a leveling of windfall tax revenues result in a reduced deficit. However, the average differences in the deficit estimates between the two cases are small; they average less than 1 percent of the total deficit over the 1983-86 period.

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# Appendix A

## Company Names

OIL AND GAS DRILLING, FIELD SERVICES

ANGLO ENERGY LTD-CL A
ASTRO DRILLING CO
BLOCKER ENERGY CORP
BOW VALLEY INDUSTRIES LTD
BUTTES GAS & OIL CO
CHIEFTAIN DEVELOPMENT CO LTD
CRAWFORD ENERGY INC
DRILLERS INC
(A) GLOBAL MARINE INC
HELMERICH & PAYNE
KANEB SERVICES INC
KENAI CORP
PARKER DRILLING CO
PENINSULA RESOURCES CORP
RATLIFF DRILLING & EXPL CO
(A) READING & BATES CORP
RIO GRANDE DRILLING CO
ROWAN COS INC
(A) SEDCO INC
SOUTH TEXAS DRILLING & EXPL
TRANSCONTINENTAL ENERGY CORP
UNIT DRILLING & EXPLORATION
VERNA CORP
ZAPATA CORP
BERRY INDUSTRIES CORP 1979
DIGICON INC
EXPLORATION SURVEYS INC-CL A
HELM RESOURCES INC
SEIS PROS INC
SEISCOM DELTA INC
ALTEX OIL CORP
CRUTCHER RESOURCES CORP
GEARHART INDUSTRIES INC
ICO INC
MONUMENT ENERGY SERVICES
PENGO INDUSTRIES INC
(A) SCHLUMBERGER LTD
WEATHERFORD INTERNATIONAL
(A) WESTERN CO OF NORTH AMERICA

MAJORS

(A),(B) STANDARD OIL CO (OHIO)
(B) AMERADA HESS CORP
(A),(B) ATLANTIC RICHFIELD CO

(A),(B) EXXON CORP
(A),(B) GETTY OIL CO
(A),(B) GULF OIL CORP
(A),(B) MOBIL CORP
(A),(B) PHILLIPS PETROLEUM CO
(A),(B) SHELL OIL CO
(A),(B) STANDARD OIL CO (CALIF)
(A),(B) STANDARD OIL CO (IND)
(A),(B) SUN CO INC
(A),(B) TEXACO INC
(A),(B) UNION OIL CO OF CALIFORNIA
(A),(B) TENNECO INC

PRODUCERS

ADOBE OIL & GAS CORP
AMERICAN PUBLIC ENERGY CO
APACHE CORP
ARGO PETROLEUM
BARNWELL INDUSTRIES
BARUCH-FOSTER CORP
BEARD OIL CO
BELCO PETROLEUM CORP
BRASCAN LTD-CL A
CABOT CORP
CAPITAL ENERGY CORP
CONSOLIDATED OIL & GAS
DAWSON OIL
DOME PETROLEUM LTD
DORCHESTER GAS CORP
DYCO PETROLEUM CORP
ENERGY MANAGEMENT CORP
ENERGY MINERALS CORP-COLO
ENSTAR CORP-DEL
EXETER OIL CO LTD-CL A
FELMONT OIL CO
GALAXY OIL CO
HERSHEY OIL CORP
INEXCO OIL
INTEGRATED ENERGY INC
MCO RESOURCES INC
MCO HOLDINGS INC
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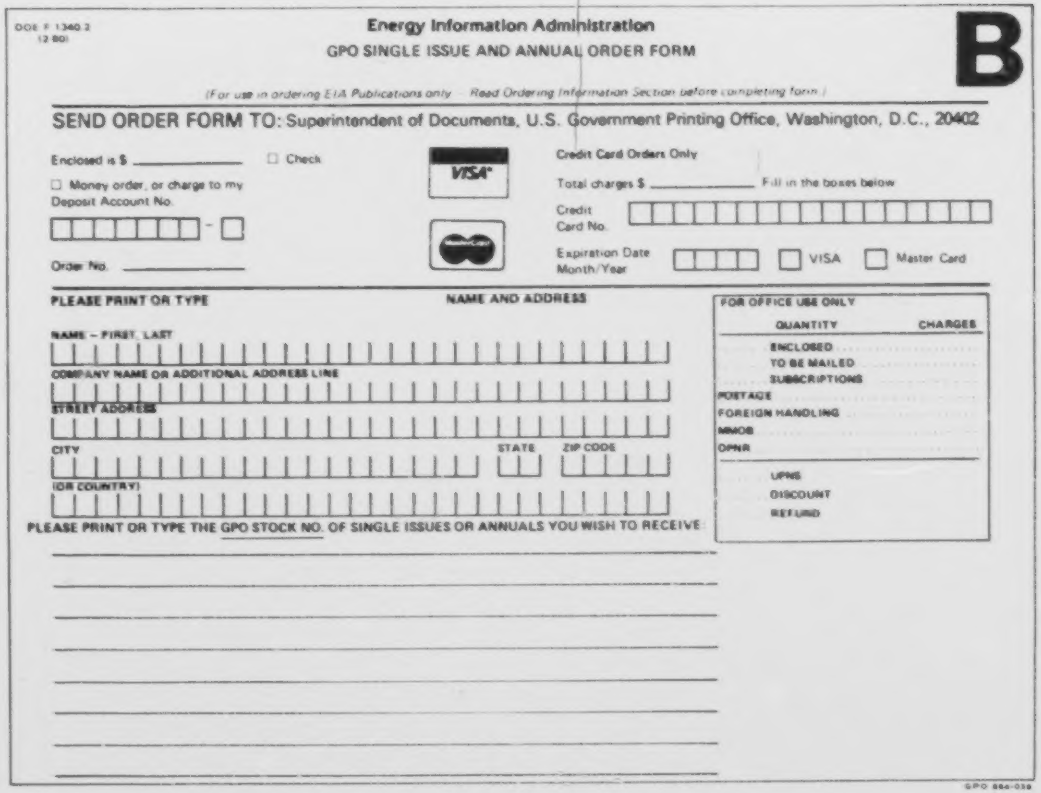

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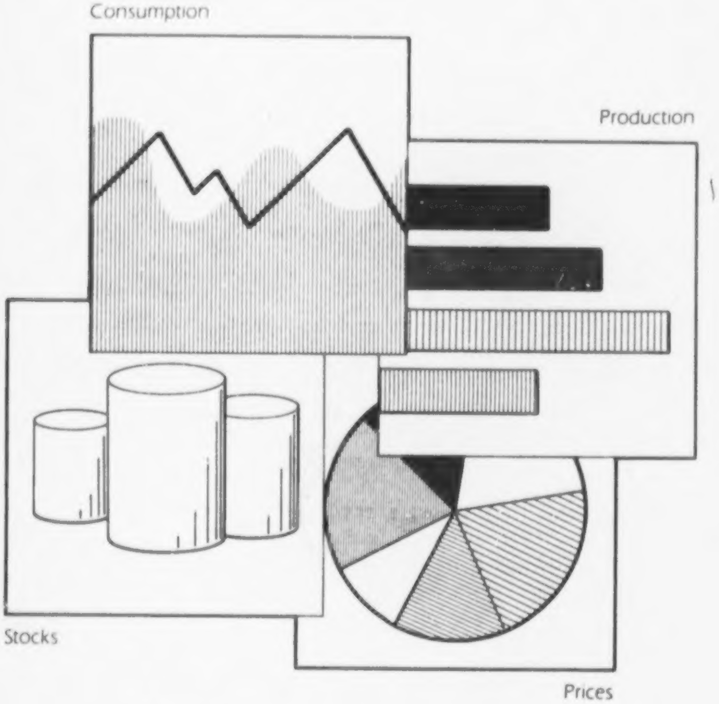
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## QUESTIONS FROM SENATOR JOHNSTON

## PRICE-ANDERSON ACT

Question 116: What is the DOE's position about extension of the Price-Anderson Act provisions affecting DOE contractors? Please provide the Committee with draft legislation that would implement this policy.

Answer: The Department is in the process of finalizing its position on what the limitation on liability should be for the Department contractors. At this time, it appears that H.R. 51, introduced by Congressman Price on January 3, 1985, to amend the Price-Anderson Act, Section 170 of the Atomic Energy Act of 1954, as amended, would parallel much of the Department's thinking. However, the Department may recommend modification of the Price amendment so as to also include appropriate consideration of civilian and defense high level waste and spent fuel facilities.

## QUESTIONS FROM SENATOR JOHNSTON

## RESIDENTIAL CONSERVATION SERVICE

Question 117: Please answer the January 15, 1985, letter from Senator Weicker and me. This letter asked for a legal analysis of your views about DOE and utility obligations under the RCS program after January 1, 1985.

Answer: DOE's position on the utility obligations under the RCS program after January 1, 1985, is that utilities covered by NECPA are allowed to terminate their RCS programs within a reasonable time after they have completed their current cycle of unconditional audit offers. The legal analysis supporting this position will be provided to you shortly.

QUESTIONS FROM SENATOR FORD

URANIUM ENRICHMENT

Question 118: In April of last year the General Accounting Office published a report entitled "Information on DOE's Costing and Pricing of Uranium Enrichment Services" (RECD-84-156). This report was quite critical of the Department's enrichment pricing. Please provide the Committee with a detailed, item-by-item response to this report, including an analysis of how these pricing policies insure that the provision of enrichment services by DOE will continue to recover program costs.

Answer: Enclosed is a copy of the Departments detailed comments as submitted to former Congressman Ottinger on June 11, 1984, on the General Accounting Office report entitled "Information on DOE's Costing and Pricing of Uranium Enrichment Services." Our comments include an analysis of how our pricing policies insure cost recovery and reflect a general disagreement with the General Accounting Office's conclusions.

THE SECRETARY OF ENERGY
WASHINGTON, D.C. 20585

June 11, 1984

Honorable Richard L. Ottinger
Chairman, Subcommittee on Energy
  Conservation and Power
Committee on Energy and Commerce
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

The Department of Energy (DOE) received the April 25, 1984, General Accounting Office (GAO) report on "Information on DOE's Costing and Pricing of Uranium Enrichment Services" several days after its release. On May 9, 1984, you requested official DOE comments.

We are pleased to note the GAO statement that the information in their report needs to be viewed in the context of the highly competitive enrichment market the program operates in. The United States is no longer a monopolist that can dictate terms and prices to the free world enrichment market. With current large worldwide inventories of enriched uranium and excess enrichment capacity, the buyers of enrichment services are effectively setting terms and prices. In order to respond to this situation, DOE has modified its enrichment strategy, including issuance of the new Utility Services contract, enhanced cost reduction efforts, an accelerated advanced technology selection, and improved customer relations. Without these new initiatives, the Department's uranium enrichment program was destined to experience continued losses in sales. Had we allowed this to happen, a potential financial loss to the Government could have been incurred, and the recovery of historical and future enrichment costs would have been seriously jeopardized. While only 4 months into implementation of the modified program strategy, all indications are that the revised approach is working well. We have received indications from over 70 percent of our customers that they will convert to the new contract.

We share your concern that the program operate within existing statutory program requirements and that we operate in the future without federal subsidy. Our program strategy not only meets these requirements, but is necessary in order to preserve a viable and competitive U.S. enrichment enterprise. Achieving these goals also requires the cooperation and interchange of ideas between the Department and Congress. We commit ourselves to keep the Congress fully informed and work with the committees as they proceed through the legislative process.

From our observation, the GAO report is limited to answering five questions posed by your committee. However, the Department finds some of the GAO answers to the questions are incomplete and thus may lead the reader to draw inaccurate conclusions. Our comments to the GAO answers are enclosed.

We appreciate the opportunity to comment on the GAO report.

Sincerely,

Donald Paul Hodel

DONALD PAUL HODEL

Enclosure

Department of Energy (DOE) Comments on
General Accounting Office (GAO) Report
Dated April 25, 1984,
"Information on DOE's Costing and Pricing
of Uranium Enrichment Services"

1. The first question addresses DOE's historic pricing policy. The GAO answer to this question is basically correct as it provides historical information regarding past DOE pricing practices. The GAO answer does not address areas where DOE has implemented changes without amending the previous criteria and where judgment has been applied in the past in fulfilling legislated cost recovery requirements. For example, the Department has made changes in several of the cost elements to be included in the charge as well as in the accounting treatment of the cost elements. The Department twice altered the scope of process development costs to be included: in 1973, to include centrifuge costs, and in 1977, to include advanced isotope separation costs. The method of accounting for imputed interest was changed in 1978 to expense all interest costs in the current year. Previously, a portion of these costs was capitalized. Also in 1982, the methodology of imputing interest on natural uranium inventories was revised. These changes all had a significant impact on the definition of costs, were consistent with the criteria, and were made known to Congress after the price which reflected the change was announced.

The GAO answer also omits the fact that the prevailing criteria at 38 FR 12180, effective on May 9, 1973, were deliberately drafted to eliminate references to existing contracts and to establish more general terms and conditions than previous criteria. The GAO offered no legal objection to the proposed criteria changes and offered the following comments:

> "...We believe that the proposed changes provide AEC with the flexibility to initiate operating practices which should be helpful in accomplishing its objectives. In the final analysis, however, AEC's ability to fully accomplish its objectives will depend on future events which cannot be predicted."

*Proposed Revisions to the Criteria and Contracts for Uranium Enrichment Services*, Report to the Joint Committee on Atomic Energy by the Comptroller General of the United States, B-159687, March 5, 1973, at p. 13, 14, and 26.

2. The second question centers around a comparison of DOE's historical costs to its selling prices. GAO presents a table showing historical DOE production and nonproduction costs and compares them to annual average selling prices. GAO's table implies that in the last 3 years, DOE costs were almost 40 percent higher than its selling prices. DOE believes that the method used by GAO in presenting this comparison results in a serious misrepresentation of the actual situation. The DOE selling price in any year is determined by computing the average of 10 years of all forward costs. GAO compares these prices to the actual production costs experienced by DOE in 1 year only. Not unexpectedly, this comparison yields results that differ from DOE's price. GAO also ignores the fact that DOE has been making over 30 percent of its sales from inventory during the past 3 years. By dividing DOE's total costs in only 1 year by that year's production only, and not that year's total sales, the comparison ignores the sales made from inventory. This leads to a numerical solution that is invalid for comparison to DOE's selling prices. If the price calculation is performed in the standard manner, that is including sales from inventory then the calculation yields the same figure on a 10-year average as the selling price, i.e., $135 per separative work unit (SWU). Also if the GAO method of calculation includes the sales made from inventory the $181.79 per SWU number GAO quotes for FY 1983 becomes $137.55 per SWU.

3. The third question addresses the cumulative profit of $37 million the program has realized through FY 1983. GAO states that this profit is the result of the accounting method used by DOE to value inventory, and that whereas this method is acceptable, it defers the recovery of some costs to later years. DOE agrees that the accounting method used for valuing inventory is acceptable and is commonly used in business and industry. However, DOE does not agree that the cumulative profit reported through FY 1983 is a result of the inventory valuation method. There are many other factors that affect an annual profit or loss situation. Other methods that can have a greater or equal impact on profit or loss are: capitalizing versus expensing imputed interest costs, the method of recognizing research and development costs, and the method of depreciation. For example, DOE's method of imputing interest accelerates the recovery of costs whereas the inventory valuation method defers recovery of costs.

   In summary, any thorough analysis of a profit situation requires an evaluation of all accounting treatments, not just an individual item. Further, DOE has selected its accounting methods as being those it believes are most appropriate to the enrichment enterprise, and has consistently applied those systems.

4. The fourth question concerns DOE's ability to recover costs within the $135 ceiling charge contained in the Utility Services contract. GAO's description of our methodology of the latest price calculation and accounting modification is correct, but the rationale is incomplete. DOE has reviewed with GAO several of a multitude of pricing and program options that can be accommodated within the $135 per SWU ceiling.

The accounting change for depreciation of the gaseous diffusion plants is consistent with generally-accepted accounting principles. The underlying accounting change was recommended to DOE by Arthur Andersen and Company in a September 1983 report that was provided to Congress and GAO. In establishing the prevailing enrichment pricing criteria, Congress recognized that a measure of discretion would be required in determining the costs to be included in the charge.

The first adjective describing cost recovery in the criteria is the word "appropriate;" in describing depreciation expenses, the criteria again uses the word "appropriate;" and finally, the criteria identifies one situation where the depreciation expense to be included in the charge is less than full depreciation of the gaseous diffusion plants. The Department believes the change is justified and that the criteria permit sufficient flexibility for the Department to implement the change.

A similar situation exists with DOE's decision to value its uranium inventories at its acquisition costs rather than at market prices for use in "split tails" operation. The report omits a discussion of the historic interpretation of the uranium pricing statute. The GAO does, however, point out that in a 1977 report it recommended that to provide reasonable compensation, uranium should be sold at the market price at the time of sale. Given the different market situations facing the Department in the past, uranium under "split tails" operation has been priced below acquisition costs, at acquisition costs, and above acquisition costs. Depending on market conditions, any of these formulations could satisfy the statutory requirement in section 161v of the Atomic Energy Act of 1954, as amended, that the price shall be established "... on such a nondiscriminatory basis as, in the opinion of the Commission, will provide reasonable compensation to the government for such material..." The Department seeks to value its uranium inventories at a level that is reasonable in today's marketplace. Given the highly competitive enrichment services market and the soft uranium market, we believe that valuing inventories at acquisition cost is appropriate at this time.

The GAO report states DOE can argue that it has the legal basis for making the accounting changes without modifying the criteria, but should have fully disclosed the changes to Congress prior to implementing them. The Department believes that its actions were consistent with the cost recovery provisions of section 161v of the Atomic Energy Act of 1954, as amended, the prevailing uranium enrichment services criteria, and that no amendments to the criteria were required. For this reason, the requirement of a formal submission to the appropriate congressional committees and a 45-day review period, which would be required for such amendment, was inapplicable. Further, while all information regarding the proposed accounting changes was not available to GAO pending final approval within DOE, GAO and the committee were informed of the changes the Department was considering. In fact, GAO received sufficient data on the changes that they were able to testify on March 1, 1984, on them. On March 16, 1984, GAO and your staff received another briefing on the proposed changes, and on April 3, 1984, a letter was sent to all the cognizant congressional committees notifying them of the changes.

Finally, GAO's statement that the program could have a cumulative net income loss of $3.3 billion by 1994 is misleading and omits other information provided to GAO. Most importantly, the calculation GAO cites does not consider revenues generated at $135/SWU for the FY 1986 through FY 1994 period, but at rates below the ceiling price. Thus, it is not a measure of DOE's ability to recover costs under the terms of the US contract. The Department has the ability to control outlays on an annual basis. This is the Department's standard practice and it provides for annual scrutiny by Congress of the program to assure it is being managed effectively. One must consider the many options available to DOE if future projections indicate a potential loss of the magnitude hypothesized by GAO. These options include reductions in power purchases, closing one of the gaseous diffusion plants, reductions in outlays for construction of new capacity, reductions in operating costs, and reduction in research and development outlays. To eliminate a loss of the size hypothesized in GAO's answer, the program would need to reduce costs by 13 percent or realize actual sales that are greater than those assumed in the sales projection quoted by GAO. We believe that adjustments of this magnitude, if required, are feasible. The Department is committed to taking actions to annually gauge the market and make necessary program adjustments to insure recovery of the Government's future costs. Thus, we believe the establishment of a $135 per SWU ceiling charge will not prevent DOE from recovering its costs as required by Section 161v of the Atomic Energy Act of 1954, as amended.

5. The last question concerns GAO's access to DOE data. Detailed information on the new contract and to the actual computer runs on the $135 price was not made available to GAO prior to their approval by DOE management. However, GAO was made aware of the process underway within DOE and generally of the options being discussed. Once the final decisions were made, GAO obtained full access to all data.

## QUESTIONS FROM SENATOR FORD

## ELECTRICITY COSTS FOR ENRICHMENT

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| Question 119: | What is the status of your negotiations with the Tennessee Valley Authority over electric power contracts for power for the DOE gaseous diffusion plants? What will be the impact on the program of a failure to modify these contracts? |
| Answer: | In February 1985, the Department and the Tennessee Valley Authority concluded agreements which provide for the delivery of up to a total of 150 megawatt-years of Experimental Test Energy to the Oak Ridge and Paducah plants in Fiscal Year 1985.<br>Under these agreements, the Department will have the opportunity to conduct tests and evaluate the operating flexibility of its plants and the Tennessee Valley Authority will have the opportunity to evaluate the usefulness of such flexible operating modes over a long-term period in helping to achieve a better application of electric power in the Tennessee Valley Authority region.<br>This Experimental Test Energy, which represents unfirm deliveries of electrical energy to the gaseous diffusion plants, is expected, on average, to cost approximately 20 percent less than the Tennessee Valley Authority's firm energy and could result in savings of up to $7 million per year. |

Answer 119
(continued):

No resolution has been achieved on the issue of capacity (demand) charges for energy not purchased. In FY 1986, the payment of this demand charge for power not taken will be approximately $350 to $400 million. Failure to reach a solution to this problem will require the payment of approximately $2 billion by the Department to the Tennessee Valley Authority through 1992.

QUESTIONS FROM SENATOR FORD

FLUIDIZED BED COMBUSTION

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| Question 120: | Are you aware that DOE is required under last year's Interior Appropriations bill to provide $30 million to TVA for a fluidized bed combustion demonstration project located in Paducah, Kentucky? Are you aware of any problems in providing these funds as required under the Act? Do you see any reason why this money couldn't be made available promptly? |
| Answer: | I am aware of the FY 1984 Congressional appropriation of $30 million to be used in FY 1985 and FY 1986 for the Tennessee Valley Authority-Electric Power Research Institute 160 megawatt atmospheric fluidized bed demonstration project. This project has been included in both our FY 1985 and FY 1986 budget submissions to Congress.<br>I am advised that the Department is in the final stages of implementing the agreement with the Tennessee Valley Authority that will provide for the transfer of these funds. The implementation process has taken longer than expected due, in part, to the need to obtain appropriate patent clearances and resolve conditions dealing with access to subcontractor information. These issues have now been essentially resolved, and we expect that the agreement will be signed between the Department and the Tennessee Valley Authority by the end of this month. I have asked to be kept apprised of this activity and have encouraged Deparment staff to expedite the necessary approvals as much as possible. |

QUESTIONS FROM SENATOR FORD

CLEAN COAL TECHNOLOGY

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| Question 121: | What plans do you have to evaluate the proposals submitted you in response to the clean coal solicitation? |
| Answer: | As of March 6, 1985, Fossil Energy has received 177 submissions in response to its solicitation on clean coal technologies. Of this total, 16 submissions were just letters of support and general interest. The remaining 161 informational proposals are currently being reviewed. |

The Department is dedicating the services of approximately 50 members of its professional staff to the review of these proposals. These staff members have been divided into 3 working committees, each of which is focused on a major grouping of the technologies represented by the submissions. It is anticipated that the effort will require the services of the full 50 staff members for 3 weeks with continuing effort by a smaller number until the report is prepared.

After the submissions have been analyzed, the Department will report to Congress by May 1, 1985 on the potential usefulness of each emerging clean coal technology and the extent to which Federal incentives will accelerate the commercial availability of those technologies, as directed by Congress.

## QUESTIONS FROM SENATOR METZENBAUM

### PLANNING FOR AST-5

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| Question 122: | How will AST-5 differ from AST-4 in terms of design and the assumptions that will underlie the test? Please respond in as much detail as possible. |
| Answer: | We are pleased that the International Energy Agency has adopted as the overall objective of AST-5, the training of Secretariat, member Government and industry personnel in the essential procedures and mechanisms of the International Energy Agency Emergency Oil Sharing System. However, the international effort to work out the technical aspects of the test design is still under way. We expect that this work will be completed in the late Spring 1985, at which time the appropriate governing bodies of the International Energy Agency would approve the Test Guide. We believe, therefore, that a comparison of the design and assumptions of AST-5 with AST-4 at this time is premature. We will be pleased to inform the Committee of the adoption of the final AST-5 test design once released by the International Energy Agency. |

## QUESTIONS FROM SENATOR METZENBAUM

## PLANNING FOR AST-5

Question 123: States have participated in both AST-3 and AST-4. Both DOE and the states have said that state involvement has been very beneficial because states are able to learn what is expected of them in an emergency and lines and means of communications are clarified. How, and to what extent, do you expect to involve states and other parties in AST-5?

If no state involvement is planned, please state the reasons for such a decision.

Answer: As indicated in the response to the previous question, the design of the international aspects of AST-5 has not been completed. Until the design details are resolved, it is not clear what level of domestic participation would be required. Accordingly, there have been no decisions made in this connection. We will keep the Committee advised as to our planning in this regard.

QUESTIONS FROM SENATOR METZENBAUM

MORATORIUM

Question 124: Please provide copies of the analyses the Department of Energy performed to determine it was most cost effective to declare a moratorium on filling the Strategic Petroleum Reserve when it reaches 489 million barrels, rather than filling it to the minimum 750 million barrel level agreed upon in the past.

Answer: The moratorium decision was based on the realities of the budget deficit, the current and projected world oil market conditions, and the substantial protection afforded by a 489 million barrel Strategic Petroleum Reserve inventory.

It is our judgment that the 489 million barrel inventory will provide sufficient protection against a disruption in the supply of foreign crude oil. It is equivalent to approximately 108 days of net United States oil imports projected for this year, and provides as much protection as that which was expected from the 750 million barrel reserve when it was originally planned or approved in 1978. We believe the moratorium represents an appropriate energy policy and a fiscally-sound budgetary policy.

QUESTIONS FROM SENATOR METZENBAUM

STATE AND LOCAL ASSISTANCE

Question 125: On a yearly basis, what will be DOE's funding level for the Low-Income Weatherization Assistance Program during the 5 year phase-out of federal support?

How many homes will be weatherized each year?

Answer: The 5 year funding level for the Department of Energy's Weatherization Assistance Program and the number of homes expected to be weatherized are:

| Year | Appropriation (in millions) | Homes Weatherized (in thousands) |
|---|---|---|
| FY 1986 | $152.9 | 148,000 |
| FY 1987 | $114.7 | 104,000 |
| FY 1988 | $76.4 | 70,000 |
| FY 1989 | $38.2 | 35,000 |
| FY 1990 | $0 | 0 |

## QUESTIONS FROM SENATOR METZENBAUM

## STATE AND LOCAL ASSISTANCE

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| Question 126: | For the same time period, what are DOE's projections of the increases in the number of homes which will be weatherized as a result of private sector resources, and increased participation by community groups and state and local governments? |
| Answer: | We believe that with increased participation by state government, local government, labor unions, service organizations, fraternal organizations, church groups, etc. it would be possible to weatherize twelve million homes over ten years. |

## QUESTIONS FROM SENATOR METZENBAUM

## STATE AND LOCAL ASSISTANCE

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| Question 127: | Please provide copies of the analyses DOE has used to determine that phasing out DOE's role in low-income weatherization will increase contributions of private sector resources and participation by community groups and state and local governments.<br>If no such analyses exist, what is the basis for DOE's decision to phase out the Low-Income Weatherization Program and other conservation grant programs? |
| Answer: | Based on several years of experience in managing the conservation grant programs, the Department is convinced that substantial non-Federal resources are available to address most of the targets of these programs. Given sufficient time to prepare, State government, local government, and private community groups are able to far exceed the level of support presently provided by the Department's grant programs.<br>During the years of this gradual phase-down, we intend to work extensively with State, local governments, and other program clients to assist them in identifying alternate sources of funding for these activities. The Department has already begun several demonstration projects illustrating innovative financing mechanisms appropriate to target sectors. |

QUESTIONS FROM SENATOR METZENBAUM

STATE AND LOCAL ASSISTANCE

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| Question 128: | Many states are planning on using oil overcharge funds to finance their low-income weatherization assistance programs. If such funds are diverted to fund DOE's program, doesn't this interfere with the Department's attempts to encourage increased participation by state and local governments? |
| Answer: | The Department will emphasize the need to maximize all available resources during the five year phase out of the program. We are proposing the use of oil overcharge monies, for which an injured party cannot be identified, to fund the low-income weatherization and schools and hospitals programs because this is an equitable means of making indirect restitution to those who could least afford being overcharged for their energy needs. This proposal would provide for continuation of these programs in FY 1986 without adding to the federal budget deficit. |

## QUESTIONS FROM SENATOR METZENBAUM

### SHARED SAVINGS

Question 129: What are DOE's plans for encouraging the shared savings energy services approach, called energy conservation companies (ECCO's)? These companies make free energy efficiency investments in buildings and receive a return on their investment by sharing the energy savings with the building owner over a period of years.

Answer: We are assisting and supporting a Department of Defense pilot test of the shared savings concept within the Federal government. The Navy is taking the lead in the Department of Defense shared savings experiment and has selected three sites for initial shared savings contracts. The Department is providing technical assistance and procurement expertise to the Department of Defense as well as helping to underwrite the cost necessary to administer and monitor the pilot projects. Federal agencies are briefed at the "656" Committee meetings on the status of the Navy's shared savings projects and on special studies being conducted by the Federal Energy Management Program office on approaches to implementing energy services contracts in Federal facilities.

Our Weatherization Assistance Program is working with three States to demonstrate the applicability of the shared savings concept to finance energy conservation activities in the low-income housing sector. In Minnesota, the State is implementing a demonstration project in a multi-family residence, assisting the landlord to acquire the services of an energy services company and monitoring project activities. New York State is working with a local program operator to develop a business plan to establish an energy services company.

In Pennsylvania, a local weatherization agency, with assistance from the State and a bank, is preparing a loan interest reduction plan for an eligible landlord to obtain a weatherization loan. Case studies of these projects will be prepared, to assist others interested in undertaking similar activities.

The Department's Institutional Conservation Program is implementing:

- a project with the Urban Consortium to demonstrate the feasibility of using energy service companies to finance energy conservation activities at three selected sites
- cooperative projects with three States to work with ICP grant applicants who did not rank highly enough to qualify for funding under the program, but who might be able to work together to attract private capital investment through shared savings or similar mechanisms.

Both projects will explore the legal, technical, financial and organizational issues related to the use of energy service companies in institutional and public buildings.

Through their State Energy Conservation Program and Energy Extension Service programs, a number of States have provided training and conducted workshops and other information programs on the services available through energy services companies.

We are also preparing a manual and computer software program to help public and not-for-profit institutions analyze innovative financing options. In addition, we have established a clearinghouse on energy financial partnerships to help coordinate available information and activities in alternative financing of energy conservation projects. The clearinghouse maintains a collection of information resources and literature on alternative financing, with special emphasis on shared savings contracting and procurement issues pertaining to public sector applications.

QUESTIONS FROM SENATOR METZENBAUM

AUTOMOBILE FUEL ECONOMY STANDARDS

Question 130: Will DOE have comments on the petitions of Ford, General Motors, and the Automobile Importers Association of America to reduce automobile fuel economy standards, which were filed on Friday, March 1, 1985?

Answer: Yes, the Department of Energy will provide comment on these petitions to the Department of Transportation. This coordination between the Departments of Energy and Transportation on fuel economy issues is required by the Department of Energy Organization Act.

## QUESTIONS FROM SENATOR METZENBAUM

## U.S. PARTICIPATION IN INTERNATIONAL ENERGY PROGRAM

Question 131: Should the U.S. continue to participate in the International Energy Program?

If so, why? If not, what is the best way to deal with a global energy shortage?

Answer: The International Energy Program is implemented through the International Energy Agency (IEA). The Administration participates in the International Energy Agency because it provides a basis for reducing unnecessary conflicts among key energy consuming countries and provides the necessary administrative structure for dealing in a coordinated manner with issues of mutual interest. This coordination can occur during a supply disruption as well as in the planning for energy shortages in both the short and long term.

The International Energy Agency emergency system provides a mechanism to mitigate the economic damage from an interruption of oil imports. Competitive panic buying among the major industrialized countries can lead to exaggerated price rises. On the other hand, cooperation, including exchange of information and sharing of oil supplies, can help to calm markets and avoid unnecessary economic damage. Thus, collective responses to a major disruption can significantly reduce the economic losses of an interruption and reduce combined costs of energy security preparedness.

The International Energy Agency supports U.S. security objectives in other areas as well. The link between the energy vulnerability of International Energy Agency members and their political and security vulnerability is direct and inescapable. An interruption of major proportions could provoke a divisive competition for oil supplies among our allies, most of whom are more dependent upon imports than we and would be under strong pressure to make accommodations to secure vital oil supplies. Thus, the International Energy Agency sharing system is designed to reinforce our alliances during an energy crisis.

The International Energy Agency provides the opportunity for general consultation and coordination among governments. An example is the July 11, 1984 International Energy Agency policy decision regarding a coordinated drawdown of strategic stocks. This agreement recognizes the value of using stocks early in a significant supply disruption and establishes a means by which such drawdown can be implemented on a coordinated basis.

Finally, the International Energy Agency serves as a highly valuable multilateral forum for research and development cooperation. Currently the Department participates in 33 program agreements which span a range of activities from the exchange of information and personnel to the utilization of facilities valued from a few million to over a 100 million dollars. The International Energy Agency makes possible the exchange of views of Member Countries on research and development policies, acts as a clearinghouse for information on the status of energy technologies, and serves as independent reviewer of proposals for major, new international projects in selected areas. The Department is currently developing with International Energy Agency Member Countries a new policy initiative for greater research and development collaboration. This policy is eventually to be endorsed by the Energy Ministers of all the International Energy Agency Member Countries, with the end result of expanding opportunities, both bilaterally and multilaterally, for collaboration to increase scientific productivity and to make the most economic, efficient use of the scientific and technical resources of International Energy Agency Member Countries. In sum, the International Energy Agency is the most active multilateral vehicle for working together with other countries in the area of energy research and development.

## QUESTIONS FROM SENATOR METZENBAUM

## POWER MARKETING ADMINISTRATIONS

| | |
|---|---|
| Question 132: | The FY 86 budget proposal calls for power marketing administrations to repay principal on a straight line schedule and interest on the unpaid balance set to match the cost of Treasury long term borrowing. You estimate budget savings of nearly $1 billion in fiscal 1986, $823 million in FY 87, $806 million in FY 88.<br>Would you provide a breakdown of how you achieve these savings? What savings result from simply moving to an annual amortization schedule? What savings result from adjusting interest rates to market levels? Please provide such a breakdown in the aggregate and for each PMA. |
| Answer: | The attached table shows the incremental budget impact of the proposed reforms for each of the five power marketing administrations.<br>Attachment. |

Attachment to Question 132

| Power Marketing Administrations | | Additional Repayment ($ Millions) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1986 | 1987 | 1988 | 1989 | 1990 | 1986-1990 |
| Bonneville | Principal........ | 107 | 116 | 130 | 88 | 46 | 487 |
| | Interest......... | 492 | 434 | 71 | 199 | 32 | 1,528 |
| | | 599 | 550 | 501 | 287 | 78 | 2,015 |
| Western | Principal........ | 4 | 7 | 9 | 12 | 31 | 63 |
| | Interest......... | 171 | 161 | 170 | 125 | 101 | 728 |
| | | 175 | 168 | 179 | 137 | 132 | 791 |
| Southeastern | Principal........ | 6 | 12 | 12 | 12 | 13 | 55 |
| | Interest......... | 80 | 66 | 57 | 37 | 20 | 260 |
| | | 86 | 78 | 69 | 49 | 33 | 315 |
| Southwestern | Principal........ | 7 | 7 | 8 | 7 | 5 | 34 |
| | Interest......... | 64 | 60 | 53 | 37 | 24 | 238 |
| | | 71 | 67 | 61 | 44 | 29 | 272 |
| Alaska | Principal....... | -- | -- | -- | -- | 1 | 1 |
| | Interest........ | 9 | 8 | 7 | 5 | 3 | 32 |
| | | 9 | 8 | 7 | 5 | 4 | 33 |
| Total | Principal....... | 124 | 142 | 159 | 119 | 96 | 640 |
| | Interest........ | 816 | 729 | 658 | 403 | 180 | 2,786 |
| | | 940 | 871 | 817 | 522 | 276 | 3,426 |

## QUESTIONS FROM SENATOR METZENBAUM

## POWER MARKETING ADMINISTRATION

Question 133: When will you submit formal legislation to implement your budget proposals on PMA's?

Answer: Legislation authorizing the transfer to the State of Alaska of projects managed by the Alaska Power Administration will be submitted to Congress in the near future. Legislation regarding the Power Marketing Administration repayment issue was submitted with the President's budget. It appears at page I-J30 in the Appendix to the Budget for Fiscal Year 1986 under the heading "General Provisions - Department of Energy" as section 308 and reads as follows:

> "Sec. 308. Notwithstanding any other provision of law, the unpaid balance of principal for power and irrigation investments, to be repaid by the power marketing administrations, shall be repaid annually at a level not less than would be required under a straight-line amortization schedule, and annual interest payments shall be made on the total unamortized balances of such power and irrigation investments, at an interest rate to be set each fiscal year equal to the average yield during the preceding fiscal year on interest-bearing marketable securities of the United States which have terms of 15 years or more remaining to maturity, with the average yield computed based on average daily bid prices. If necessary to implement this provision, each power marketing administration is authorized to establish contingency reserves."

## QUESTIONS FROM SENATOR BINGAMAN

## TRADE DEFICIT

Question 134: The Department of Commerce has just released new figures on our trade deficit. The trade deficit for January rose to $10.3 billion. This was a $2.3 billion increase over December's $8 billion total. The trade deficit will only continue to get worse as the dollar remains strong on foreign markets. A strong dollar makes foreign goods less expensive in the U.S., drawing in imports, while the price of U.S. products increases in overseas currencies, making them less competitive. While the flow of cheap imports helps to dampen inflationary trends, they undercut American manufacturers' sales in their home market and act to hold down the rate of economic growth. Experts agree that the soaring trade deficit could lower the GNP by as much as 1 percent this year. Petroleum imports make up a major proportion of the trade deficit.

a. While we experienced a 3.3% decline in the value of petroleum imports, they still account for a significant percentage of the trade deficit problem. What studies or long term planning has the Department conducted related to this problem?

b. Does the agency have any recommendations for dealing with this problem?

Answer: a. The Department of Energy is participating in an interagency group chaired by the Office of the U.S. Trade Representative that is preparing a paper on petroleum product imports. The report will examine options and remedies in the light of trade agreements with our allies, and effect on other industries and on U.S. exports.

It should be noted that the current energy trade balance accounted for about 48 percent of the total 1984 trade deficit. That is the lowest level since 1975, the last year in which the United States ran a trade surplus. It should also be noted that the energy trade deficit now stands at about 1.4 percent of total GNP, the lowest figure since 1975. From 1976 to 1981, the energy trade deficit ranged from 1.7 to 2.9 percent of GNP.

b. The Department opposes the imposition of a tariff or fee on crude oil or petroleum product imports as a means of lowering the trade deficit. Our analysis of proposals to deal with rising petroleum imports indicates that government intervention will force United States consumers to pay higher prices for products that could be produced at less expense abroad. Intervention will not enhance our national or energy security and could jeopardize the Nation's economic growth.

We however will continue monitoring this situation and will await the report of the interagency group on trade.

QUESTIONS FROM SENATOR BINGAMAN

DEPARTMENT OF ENERGY/URANIUM

Question 135: I am extremely concerned with the "viability" of the domestic uranium industry. The agency's most recent determination of January 4, 1985, that the domestic uranium industry is "viable" defies logic. The determination was made almost simultaneously with the closing of the Kerr McGee and Western Nuclear operations in New Mexico. The new uranium enrichment contract which restricts demand for uranium only exacerbates the situation.

a. Please provide me an explanation of your viability criteria for the domestic uranium industry.

Answer: a. Under Section 170B of the Atomic Energy Act as amended, 42 U.S.C. 2210b, Congress required the Department of Energy to issue, by rule, criteria to assess the viability of the industry and specified eight criteria that the Secretary must weigh and consider in reaching his conclusion. The statutory criteria require an evaluation of the following items: reserves, production capacity, employment and price levels, capital investment and exploration plans of the uranium industry, import levels, and inventories and requirements of domestic utilities. Accordingly, following public notice and an opportunity to be heard, the final rule that emerged reflects the eight criteria specified in the statute itself. Attached is a copy of the final rule published in the Federal Register on October 6, 1983.

## QUESTIONS FROM SENATOR BINGAMAN

## URANIUM ENRICHMENT

Question 135: I am extremely concerned with the "viability" of the uranium industry. The agency's most recent determination of January 4, 1985, that the domestic uranium industry is "viable" defies logic. The determination was made almost simultaneously with the closing of the Kerr McGee and Western Nuclear operations in New Mexico. The new uranium enrichment contract which restricts demand for uranium only exacerbates the situation.

Question 135 (b): What steps can be taken to assist the currently depressed condition of the industry?

Answer: I will, of course, carefully examine the viability criteria prior to making my annual determination on the state of the industry during the summer of this year and will make every effort to assure that the mining industry's concerns are taken into account in enrichment program decisions. I believe that both the mining and milling industry and this Nation's enrichment program have been adversely impacted by foreign competition and that further expansion of the non-United States enrichment business, together with expected continued decrease in demand worldwide, will further depress the market for United States produced ore. The new enrichment contracts were developed to discourage additional foreign penetration of the domestic market. I have been advised that they permit more flexibility in the customer's choice to use additional uranium than many previous Department of Energy contracts. For these reasons, the contracts should result in increased sales of uranium.

Question 135 (c): Please provide me with justification of why the Department should not immediately implement Section 161V of the Atomic Energy Act to maintain the viability of the domestic industry?

Answer: The former Secretary of Energy determined on December 31, 1984, that, for 1983, the domestic uranium industry was viable. I plan to make my own first annual determination on an expedited basis by summer of this year. Until then, we will closely monitor developments in the uranium industry.

## QUESTIONS FROM SENATOR BINGAMAN

## URANIUM ENRICHMENT

Question 135(d): Did the DOE consider the effects of the policies embodied in the new U.S. enrichment contract on the domestic uranium industry prior to the issuance of that contract?

Answer: Yes, the Department did consider the effects of the policies of the U.S. enrichment contract on the domestic uranium industry. Department staff met with mining industry representatives twice prior to contract issuance. For example, one of the items discussed and a key element of the U.S. contract is the availability of a Variable Tails Assay Option (VTAO) for the purpose of obtaining enriched uranium. To the extent that customers select this option it would result in increased uranium feed deliveries and could be of benefit to the domestic mining industry. This was a major consideration in our decision to permit VTAO. It also appears likely that our customers will select, on the average, VTAO tails assays which will result in increased uranium use. The final contract terms are a balance of the needs of the enrichment enterprise, the mining industry, and our utility customers.

federal register

Thursday
October 6, 1983

## Part IX

# Department of Energy

### Energy Information Administration

### Criteria To Assess Viability of Domestic Uranium Mining and Milling Industry

**DEPARTMENT OF ENERGY**

**Energy Information Administration**

**10 CFR Part 761**

## Criteria to Assess Viability of Domestic Uranium Mining and Milling Industry

**AGENCY:** Energy Information Administration, DOE.

**ACTION:** Final rule.

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**SUMMARY:** The Energy Information Administration (EIA) of the Department of Energy (DOE), in response to requirements set forth in Section 170B of the Atomic Energy Act of 1954 (42 U.S.C. 2210b), is establishing criteria which will be used to assess the viability of the domestic uranium mining and milling industry. The assessment is to be set forth in an annual report to the Congress and the President. The final regulation describes the criteria and identifies information collections necessary to enable the Secretary of Energy to determine if the criteria have been met.

**FOR FURTHER INFORMATION CONTACT:**

Dr. R. Gene Clark, Director, Nuclear and Alternate Fuels Division, Energy Information Administration, EI-53, Room BG-057, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, D.C. 20585, (202) 252-6363.

Ms. Laurie R. Garnand Ford, Office of the General Counsel, GC-41, Room 6A-211, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, D.C. 20585, (202) 252-8618.

**SUPPLEMENTARY INFORMATION:**

I. Background
II. Public Hearings
III. Comments on Proposed Rule
IV. Final Rule
V. Rulemaking Requirements
A. Section 501 of the DOE Organization Act
B. National Environmental Policy Act
C. Executive Order 12291
D. Regulatory Flexibility Act
E. Paperwork Reduction Act

### I. Background

Section 23(b) of Pub. L. No. 97-415, amends the Atomic Energy Act of 1954 by adding a new section 170B (42 U.S.C. 2210b) which requires the Secretary of Energy to monitor and, for the years 1983 through 1992, make an annual determination of the viability of the domestic uranium mining and milling industry. Section 170B further requires the Secretary, within 9 months of enactment, to establish by rule, after public notice, criteria which will form the basis of these annual determinations and specifies that certain criteria shall be considered.

On August 12, 1983, EIA published a proposed rule (48 FR 36792) which set forth proposed criteria to be used in assessing the viability of the domestic uranium mining and milling industry. The EIA proposed to assess industry viability based upon three major attributes—resource capability, operational capability and financial capability. To determine the status of the industry's viability, the EIA proposed to compare current and projected values of these attributes to minimum values. To be deemed viable, the values of each of the three attributes, for the entire industry, needed to meet the minimum value or be projected to meet those conditions within two years of the time of assessment. The proposed approach has been reconsidered and refined in response to public comments received by EIA. A detailed explanation of the changes made to the proposed rule, including comparisons between the proposal and the final rule, is set forth below in **SUPPLEMENTARY INFORMATION** Section III. Comments on Proposed Rule. An explanation of the rule itself is contained in Section IV. Final Rule.

### II. Public Hearings

Pursuant to the aforementioned notice on the proposed rule, the EIA held three public hearings—on August 26, 1983, in Washington, D.C.; on August 30, 1983, in Casper, Wyoming; and on September 1, 1983, in Albuquerque, New Mexico. Transcripts of these hearings and copies of all written comments received during the 30-day written comment period are available in the DOE Freedom of Information Reading Room, Room 1E-190, Forrestal Building, 1000 Independence Avenue SW., Washington, D.C.

### III. Comments on Proposed Rule

In response to the notice of proposed rule, 65 comments were received from the public, the Congress, other Federal agencies, and State and local officials. About half of the comments were from uranium-related companies and corporations, including uranium-related trade associations. Seventeen comments were received from elected and appointed public officials, including two members of Congress and two governors. Seven comments were from labor union officials. The remaining comments were received from public interest groups and from private citizens.

All comments received by EIA, both at the public hearings and the written comments received thereafter, were carefully reviewed and fully considered in the formulation of the final rule.

Several comments dealt with the complexity of, and a perceived lack of clarity in, the proposed rule. Most of the elements in the proposal were retained in the final rule, but the description of these elements was revised to improve the rule's clarity and aid in reader understanding.

In addition to revising the text of the rule, several definitions were added to § 761.2, including a definition of the "domestic uranium mining and milling industry." The added definitions of "domestic economic reserves" and "production cost" closely conform to internationally-accepted definitions, as used by the Nuclear Energy Agency (Organization for Economic Cooperation and Development) and the International Atomic Energy Agency.

"Unfilled requirements," a component of total requirements, is defined to be consistent with EIA's current uranium market data collections, with the addition of any future purchases that may be required for Government needs. This definition responds to several comments on the proper incorporation of uranium inventory considerations, by clarifying that requirements include an allowance for use of domestic inventories and also incorporates any purchases needed to maintain a prudent level of inventory. Several commenters took exception to the proposed requirement that the domestic uranium industry, to be deemed viable, must be capable of supplying 100 percent of domestic utility requirements. A convincing argument was made that energy supply security would be a more appropriate measure than total utility requirements. The final rule responds to these comments by defining "domestic uranium supply security requirements" (see § 761.2(m)) as the basis for measuring the industry's resource capability, supply response capability, and financial capability. The EIA will consider a *range* of domestic uranium supply security requirements, to be defined by hypothesizing several import supply disruption scenarios.

Many comments included the opinion that the definition of benchmark price, against which the EIA proposed to compare production costs for determination of "economic reserves" in resource capability, was inadequate. In general, commenters suggested that the procedure for calculating this value needed further explanation. The EIA has responded to these comments by specifying in the final rule that in determining economic reserves, EIA will consider prices in specific contracts to which the reserves may be committed, or appropriate market conditions for reserves not committed to contracts.

Suggestions that considerations of Government uranium requirements and Government stockpiles of uranium be included in the criteria have been addressed in the final rule. The rule includes anticipated Government purchases in the definition of unfilled requirements, and recognizes the DOE policy on emergency sales and loans to its enrichment customers as a potential last-resort source of supply, after identifying that provision of such supply will not jeopardize Government military and enrichment working inventory needs.

Numerous comments were received that the Financial Capability attribute was redundant, based on the belief that if there are sufficient resources and the industry is operationally capable, there is an implicit assumption of financial health. Some commenters believed the financial criterion should be eliminated; others suggested redefining Operational Capability to include financial factors. These viewpoints do not recognize that although resource, operational and financial attributes are interrelated, in order to make an adequate assessment of the capability of an industry a knowledge and understanding of each individual component is required. This is of particular importance in the financial area where short-term liquidity problems may negate the future long-term solvency of an organization despite favorable reserve positions and technical capabilities. Thus, EIA has retained a Financial Capability criterion in the Final Rule.

The suggestion, made by two commenters, that potential new production facilities be included in measuring potential capacity, has been incorporated in § 761.4 Supply Response Capability. Comments expressing concerns about a perceived lack of recognition of the proper importance of Statutory Criterion No. 1 have been addressed in the final rule by elevating this criterion from a contributory (secondary) status to a fundamental (primary) status, as addressed in § 761.6 Import Commitment Dependency. Numerous commenters expressed the concern that the methodology proposed by EIA was too "prescriptive" and that the ultimate determination on the viability issue should not be made mechanically, on the basis of an arithmetic formula. Several commenters felt that the responsibility to weigh subjective factors should appropriately lie with the Secretary of Energy. The EIA agrees that viability may be difficult to determine by a purely prescriptive method. Therefore, the proposed requirement for viability determinations for each of the primary criteria has been deleted. In addition, § 761.7 of the final rule provides that the Secretary of Energy will determine viability based upon information supplied by EIA on the current and projected status of each of the criteria listed in §§ 761.3 to 761.6.

A compelling argument was made that considerations about effects on employment and on communities be included in any criteria for use in measuring the viability of a U.S. industry. This concern was expressed in the comments of each elected government official and each union representative. The EIA recognizes that information on employment is an important contributor in determining both the supply response capability and the financial capability of the domestic uranium industry. The information, provided by the EIA to the Secretary of Energy, upon which a determination of the viability of the industry will be based, will include data on current and projected levels of employment. In addition, these data will be considered by the Secretary in determining whether or not to request an investigation by the U.S. International Trade Commission under section 201 of the Trade Act of 1974.

In response to concerns expressed by eight commenters about the sensitivity of data that would be collected, especially the competitive harm that might result from disclosure of company-specific financial data, a section has been added to the final rule (see § 761.8(b)) to acknowledge that certain information required by EIA may constitute confidential commercial information, and to provide that individual company data will be kept confidential to the maximum extent permitted by law. The consequences of a finding of non-viability were a major concern of several witnesses at the public hearings, and the issue was also raised in three written comments. The EIA does not agree that speculation about the various possible results of applying the criteria is relevant to the establishment of objective criteria for measuring the viability of the domestic uranium mining and milling industry.

Comments received on possible requirements under section 501 of the DOE Organization Act, the National Environmental Policy Act, Executive Order 12291, and the Regulatory Flexibility Act are addressed in Section V. Rulemaking Requirement.

## IV. Final Rule

The Energy Information Administration (EIA) will measure the extent to which the domestic mining and milling uranium industry will be capable, at any particular time, of supplying the needs of the domestic nuclear power industry under a variety of hypothetical conditions. This measure will involve four major attributes of viability: Resource capability, supply response capability, financial capability, and import commitment dependency. The EIA will define indices of these attributes, collect and analyze data to determine current values of the indices, and estimate future values under a range of market assumptions. Information developed by EIA will include, where applicable, uncertainty bands or measure of levels of confidence. The methodology proposed by EIA recognizes that some of the specified criteria are fundamental measures of the uranium industry's capability, whereas others are determinants of future values of capability. The fundamental criteria which define the four attributes are the following—

*Resource Capability:* Whether domestic economic uranium reserves can supply all domestic needs for a future ten-year period;

*Supply Response Capability:* The level of domestic uranium production capacity sufficient to meet projected domestic nuclear power needs for a ten-year period;

*Financial Capability:* The ability of the domestic uranium industry to obtain funds adequate to finance the level of production capability defined under supply response capability.

*Import Commitment Dependency:* Whether executed contracts or options for source material or special nuclear material will result in greater than 37½ percent of actual or projected domestic uranium requirements for any two-consecutive-year period being supplied by source material or special nuclear material from foreign sources.

The contributory criteria factors indicate changes in the fundamental criteria. For example, the size of domestic economic uranium reserves (the measure of resource capability) would be increased by the results of domestic uranium exploration expenditures (Statutory Criterion No. 5) but decreased by domestic uranium production (Statutory Criterion No. 8). In addition, the number of known uranium deposits that would be considered "economic" depends on future market conditions, such as projected uranium price levels (Statutory Criterion No. 8).

The relationships among the fundamental and contributory criteria are outlined in the following table:

FUNDAMENTAL AND CONTRIBUTORY CRITERIA

| Fundamental criterion | Related contributory criteria |
|---|---|
| Resource capability (4) | Domestic utility requirements (2); Exploration (5); and Production and prices (8). |
| Supply response capability (7). | Domestic utility requirements (2); Imports (3); Employment and capital investment (6); and Production and prices (8). |
| Financial capability | Domestic utility requirements (2); Imports (3); Exploration (5); Employment and capital investment (6); and Production and prices (8). |
| Import commitment dependency (1). | Domestic utility requirements (2) and imports (3). |

Note.—Numbers in parentheses refer to Criteria set forth in Section 170B.

The status of the industry's viability will be determined by the Secretary of Energy based upon the information provided by EIA on the current and projected condition of each of the four fundamental criteria and their related contributory criteria. The final rule as promulgated by EIA is intended to provide objective criteria consistent with statutory requirements and responsive to public comments. The brief summary, provided above, does not include all the details of the rule, and readers are therefore urged to read carefully its full text which is set forth below.

**V. Rulemaking Requirement**

A. *Section 301 of the DOE Organization Act:* Under Section 501(c) of the Department of Energy Organization Act (42 U.S.C. 7191(c)), the DOE is not bound by the requirements of subsections (b), (c), and (d) of that Act with respect to the promulgation of regulations if the Secretary of Energy determines that no substantial issue of fact or law exists and that the regulations in question are unlikely to have a substantial impact on the Nation's economy or large numbers of individuals or small businesses. Where it is determined that no substantial issue or impact exists, regulations may be promulgated in accordance with Section 553 of Title 5 of the United States Code.

The DOE received two comments concerning the procedural requirements of the DOE Organization Act. Both of these comments were based on the assumption that actions will result from this rule which could have a substantial impact on the nation's economy or on large numbers of individuals or small businesses. One commenter was concerned that this rule could cause a change in the current market conditions. The commenter felt that this change could cause an increase in the price of uranium which in turn could result in increased costs to electricity consumers. Another commenter expressed concern that this rule could change market conditions resulting in new exploration and production activities along with an attendant increase in environmental effects which could have an impact on individuals and small businesses. Both commenters assumed that certain actions will necessarily result from this rule which establishes criteria to assess the viability of the domestic uranium mining and milling industry. The DOE does not agree. The relationship between the establishment of the analytic criteria and the ultimate impact that could result if a number of future unpredictable events, that may or may not affect the viability of the industry, occur is simply too far removed to conclude that this rule will affect the nation's economy or large numbers of individuals or small businesses.

Therefore, the DOE believes that this rule does not raise substantial issues of law or fact and it is unlikely that it will have a substantial impact on the Nation's economy or large numbers of individuals or small businesses; accordingly, it is being promulgated in accordance with 5 U.S.C. 553.

B. *National Environmental Policy Act:* The National Environmental Policy Act of 1969, 42 U.S.C. 4321 *et seq.*, requires Federal agencies to prepare detailed environmental impact statements on proposals for major Federal actions significantly affecting the quality of the human environment. Two comments were received concerning compliance with the procedural requirements under the NEPA. Both comments expressed concern that this rule could trigger a change in the current market for uranium, which would result in new exploration and production with increased environmental effects, such as more mill tailings requiring stabilization, damage to equifers and increased emissions from the increased production at mines and mills. Although increased exploration and production of uranium could increase environmental effects associated with that process, the establishment of criteria to assess the viability of the domestic uranium industry will not directly cause new mining and milling activities. The causal relationship, if any, between establishing the criteria and environmental impact is attenuated at best. Therefore, the DOE has determined that the establishment of criteria to assess the viability of the domestic uranium industry clearly will not significantly affect the quality of the human environment; hence, neither the preparation of an Environmental Assessment nor an Environmental Impact Statement is required by the National Environmental Policy Act of 1969.

C. *Executive Order 1229:* Section 3 of Executive Order (E.O.) 12291 (46 FR 13193, February 19, 1981) requires that DOE determine whether a rule is a "major rule," as defined by Section 1(b) of E.O. 12291, and prepare a regulatory impact analysis for each major rule. The DOE has reviewed the final rule and, after consultation with the Office of Management and Budget, determined that it does not meet the E.O. 12291 definition of a major rule as one likely to result in: (1) An annual effect on the economy of $100 million or more; (2) a major increase in costs or prices for consumers, individual industries; Federal, State, or local government agencies, or geographic regions; or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

The DOE received three comments that this rule constitutes a major rule under the Executive Order. These commenters argued that the rule could cause various governmental actions which could change current market conditions with a resultant price increase in uranium such that there would be an annual effect on the economy of $100 million or more. The commenters have assumed that certain actions will automatically result from this rule. The DOE does not agree. The causal relationship between the criteria established in the rule and the ultimate impact that could result if a number of activities are taken by this Department or other federal agencies occur is too far removed to require a determination that this rule directly results in the level of impact necessary under the Executive Order to require the preparation of a Regulatory Impact Analysis. Accordingly, a regulatory impact analysis is not required.

D. *Regulatory Flexibility Act:* Pursuant to section 605(b) of the Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, the DOE finds that sections 603 and 604 of the Act do not apply to this rule because its promulgation will not have a significant economic impact on a substantial number of small entities. Two comments indicated this rule could have a significant economic impact on a substantial number of small entities. These commenters presented the same argument in support of this contention as those presented when challenging the determination made under the DOE Organization Act. These commenters have assumed that certain actions that would have an impact on small businesses would necessarily be taken by the government if these criteria are established. The nexus between the establishment of the criteria and the potential impact, if action is taken by this Department or other federal agencies, is too strained to conclude that this rule will directly result in triggering the standard in the Regulatory Flexibility Act. Therefore, DOE certifies, as required by Section 605(b), that the proposed rule will not have a significant economic impact on a substantial number of small entities.

E. *Paperwork Reduction Act.* The forms which will be used to collect the information outlined in section 761.8 either have been approved by the Office of Management and Budget in accordance with the Paperwork Reduction Act of 1980, 44 U.S.C., 3501.1 *et seq.*, and procedures implementing that Act, 5 CFR 1320.1 *et seq.*, or will be submitted for approval in accordance with those procedures when the forms are developed.

**List of Subjects in 10 CFR Part 761**

Uranium, Reporting and recordkeeping requirements.

(Sec. 23(b) Pub. L. No. 97–415, 96 Stat. 2080 (42 U.S.C. 2210b))

For the reasons set out in the preamble, a new Part 761 of Chapter III of Title 10 of the Code of Federal Regulations is to be established as set forth below.

Issued in Washington, D.C. October 4, 1983.

Donald Paul Hodel,

*Secretary of Energy.*

## PART 761—CRITERIA TO ASSESS VIABILITY OF DOMESTIC URANIUM MINING AND MILLING INDUSTRY

Sec.

761.1 Purpose and scope.
761.2 Definitions.
761.3 Resource capability.
761.4 Supply response capability.
761.5 Financial capability.
761.6 Import commitment dependency.
761.7 Determination of viability.
761.8 Reports by companies involved in domestic uranium commerce.

Authority: Section 23(b), Pub. L. No. 97–415, 96 Stat. 2080 (42 U.S.C. 2210b).

### § 761.1 Purpose and scope.

This part contains the regulations of the Energy Information Administration (EIA) of the Department of Energy (DOE) implementing section 170B of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 *et seq.*), which requires the Secretary of Energy to monitor and for the years 1983 to 1992 report annually to the Congress and the President a determination of the viability of the domestic uranium mining and milling industry. The regulations stated here provide for the establishment of criteria which shall be assessed in the annual reports and information collections necessary to determine if the criteria have been met.

### §§ 761.2 Definitions.

As used in this part:

(a) "Statutory Criterion No. 1" means an assessment of whether executed contracts or options for source material or special nuclear material will result in greater than 37½ percent of actual or projected domestic uranium requirements for any two-consecutive-year period being supplied by source material or special nuclear material from foreign sources;

(b) "Statutory Criterion No. 2" means projections of uranium requirements and inventories of domestic utilities for a 10-year period;

(c) "Statutory Criterion No. 3" means present and probable future use of the domestic market by foreign imports;

(d) "Statutory Criterion No. 4" means whether domestic economic reserves can supply all future needs for a future 10-year period;

(e) "Statutory Criterion No. 5" means present and projected domestic uranium exploration expenditures and plans;

(f) "Statutory Criterion No. 6" means present and projected employment and capital investment in the uranium industry;

(g) "Statutory Criterion No. 7" means the level of domestic uranium production capacity sufficient to meet projected domestic nuclear power needs for a 10-year period;

(h) "Statutory Criterion No. 8" means a projection of domestic uranium production and uranium price levels which will be in effect under various assumptions with respect to imports.

(i) "Domestic uranium mining and milling industry" or "domestic uranium industry" means resource ownership, exploration, development, mining, milling, and other beneficiation activities, directed specifically toward the ultimate production of uranium from mineral deposits located in the United States, to be offered for sale in the commercial marketplace.

(j) "Domestic economic reserves," as referred to in Statutory Criterion No. 4, means uranium that occurs in known mineral deposits located in the United States of such size, grade and configuration that it could reasonably be expected to be recoverable, at or below specified production costs, with currently proven mining and processing technology and under current law and regulations. Estimates of uranium mineralization size, grade and configuration are based on specific sample data and measurements of the deposits and on knowledge of deposit characteristics.

(k) "Production cost" means costs that would have to be incurred to produce uranium in the form of concentrate. They include any:

(1) Direct costs of mining, transporting, and processing the uranium ore.

(2) Costs of associated environmental and waste management.

(3) Costs of maintaining non-operating production units where applicable.

(4) Capital costs of providing new production units where applicable.

(5) Cost of finance including any unamortized past costs where applicable.

(6) Indirect costs, such as office overheads, taxes and royalties where applicable.

(7) Future exploration and development costs wherever required for further or body delineation to the stage where it is ready to be mined or otherwise extracted from the ground.

(l) "Unfilled requirements" means sum of uranium:

(1) Required to be delivered, under terms of an enrichment contract to enrichment suppliers, that is not accounted for by usage of inventory or supply contracts as of a given date;

(2) Anticipated to be purchased to maintain a prudent level of inventory; and

(3) Anticipated to be purchased to satisfy Government requirements for military or other needs.

(m) "Domestic uranium supply security requirements" means, for a given hypothetical import supply disruption, the quantity of uranium to be delivered in a given future period representing the sum of:

(1) Domestic unfilled requirements;

(2) Contracts with domestic uranium mining and milling industry companies (excluding contracts between such companies); and

(3) Contracts for uranium imports subject to the hypothetical supply disruption.

### § 761.3 Resource capability.

(a) *Components.* The following components will be used to determine the current and future values assigned to this attribute:

(1) Statutory Criterion No. 2;
(2) Statutory Criterion No. 3;
(3) Statutory Criterion No. 4;
(4) Statutory Criterion No. 5; and
(5) Statutory Criterion No. 8.

(b) *Current Status*. Statutory Criterion No. 4 will be the basis for the current status of the domestic uranium mining and milling industry's resource capability.

(1) The quantity of uranium producible from domestic reserves will be estimated by the EIA on the basis of data provided by domestic uranium mining and milling industry companies.

(2) Domestic economic reserves will be determined by the following method. The EIA will compare the estimated production cost to the price terms of any existing commercial sales contract to which the uranium may be committed. For uranium which may not be committed to commercial contracts, EIA will estimate the production cost in view of market conditions for domestic uranium supply security requirements exclusive of contracts with domestic uranium companies. Reserves will be considered economically producible when estimated production costs are less than expected prices to be realized.

(3) The quantity of domestic economic reserves will be compared to the 10-year-forward sums of domestic uranium supply security requirements with corresponding market conditions.

(c) *Projected Status*. The EIA will estimate resource capability at future times under various market assumptions.

(1) In order to project resource capability, EIA will estimate the additions to domestic economic reserves due to the results of exploration activities on potential resources, additions or subtractions to reserves due to projected changes in uranium prices, and reductions due to projected domestic production.

(2) Projected domestic economic reserves for each year will be compared to the sum of domestic uranium supply security requirements projected for a subsequent 10-year period, adjusting the unfilled requirements portion to account for such factors as projected use of the market by imports and projected changes in prices of uranium relative to enrichment services.

### § 761.4 Supply response capability.

(a) *Components*. The following components will be used to determine the current and future values assigned to this attribute:

(1) Statutory Criterion No. 2;
(2) Statutory Criterion No. 3;
(3) Statutory Criterion No. 6;
(4) Statutory Criterion No. 7; and
(5) Statutory Criterion No. 8.

(b) *Current Status*. Statutory Criterion No. 7 will be the basis for the supply response capability of the domestic uranium industry.

(1) Schedules of annual domestic uranium supply security requirements for a future 10-year period will be the benchmarks against which the ability of the domestic uranium industry to supply uranium will be compared, assuming hypothetical immediate supply disruptions or other potential developments such as changes in the degree of competition in the international uranium market.

(2) Given schedules of future requirements, EIA will estimate the technical ability (under existing legal and regulatory conditions) of the domestic uranium industry to supply those future requirements under unconstrained financial conditions. This estimate will be based on current uranium industry inventories, the capacity of uranium mills (or other beneficiation facilities) and the ability to supply those mills with uranium ore (including the availability of uranium miners). EIA will consider mining and milling facilities in operation, shut down facilities which could be reopened, facilities under development, and potential new production facilities in regions where the amount and grade of reserves justify production but where mill construction commitments are not yet evident. If there is a resulting projected need for uranium beyond the sources identified as domestic supply response capability, any potential availability of the Federally-owned stockpile in excess of its military and enrichment-plant working inventory needs will be identified for consideration.

(c) *Projected Status*. EIA will estimate vulnerability of supply response capability at future times to various potential future import supply disruptions or other international market developments.

(1) Annual schedules of domestic uranium supply security requirements, within a moving 10-year-wide future period beginning at the time of hypothetical import supply disruptions or other potential developments (such as changes in the degree of competition in the international uranium market), will be the benchmarks against which the domestic uranium industry's future projected supply response capability will be compared.

(2) In order to project supply response capability, EIA will project the evolving status of production facilities in operation, shut down, under development or planned, and potential new production facilities in regions where the amount and grade of reserves justify production but where mill construction commitments are not yet evident, up to the time of hypothetical import supply disruptions or other international market developments. The projection of status at future times will be based on present and future imports, present and projected employment and capital investment, and projections of domestic uranium production and prices. If there is a resulting projected need for uranium beyond the sources identified as domestic supply response capability, any projected availability of the Federally-owned stockpile in excess of its military and enrichment-plant working inventory needs will be identified for consideration.

### § 761.5 Financial capability.

(a) *Components*. The following components will be used to determine the current and future values assigned to this attribute:

(1) Statutory Criterion No. 5;
(2) Statutory Criterion No. 6;
(3) Statutory Criterion No. 7;
(4) Statutory Criterion No. 8; and

(5) The working capital of the uranium industry, net property, plant and equipment, capitalization, profits, availability of funds and uses to which the funds are applied.

(b) *Current Status*. The current adequacy of the domestic uranium industry's financial capability will be determined by comparing the industry's current-year sources of funds to the current-year funds needed for uranium activities, such as exploration, property development, mine and mill development, maintenance of facilities in standby condition, etc., to maintain an adequate supply response capability.

(1) Current-year domestic uranium industry fund requirements will be computed, consistent with an adequate supply response capability from § 761.4.

(2) Current-year domestic uranium industry fund availability will be determined from the information collections outlined in section 761.8.

(c) *Projected Status*. The long-term funds generation potential of the domestic uranium industry will be projected and compared to the investment and other fund needs associated with the range of projected supply response capabilities required under § 761.4.

(1) Projected fund needs will be based on projected exploration expenditures, projected employment-related expenditures, capital investment, and

other expenses projected for an adequate supply response capability.

(2) Projected fund generation potential will be based on projected domestic uranium production and prices and the projected attractiveness of domestic uranium industry investments relative to other alternatives.

### § 761.6 Import commitment dependency.

(a) *Components.* The following components will be used to determine the current and projected values of the attribute:

(1) Statutory Criterion No. 1;

(2) Statutory Criterion No. 2; and

(3) Statutory Criterion No. 3.

(b) *Current Status.* Statutory Criterion No. 1 is the basis of the current status for the import commitment dependency attribute. Scheduled uranium deliveries from contracts and options in place at the time of assessment will be compared to total uranium deliveries for domestic utility use, expected at the time of assessment. For all current and future years, EIA will estimate the quantity of foreign-source uranium expected to be used by domestic utilities within each 2-consecutive-calendar-year period and determine if such quanity represents greater than 37½ percent of total projected domestic utility requirements during the same period. The current status of this attribute will serve as the basis for the Secretary of Energy's mandatory responsibility under section 170B(e)(1) of the Atomic Energy Act of 1954, as amended by Pub. L. No. 97-415.

(c) *Projected Status.* For the projected status, EIA will estimate future uranium imports (including those from current contracts), as provided for in Statutory Criterion No. 3, and project total utility requirements consistent with EIA's projections of domestic nuclear power plant start-up dates and operating factors. A comparison of 2-consecutive-calendar-year import usage and total domestic utility requirements will be made in a manner analogous to that carried out for the current status of this attribute.

### § 761.7 Determination of viability.

The Secretary of Energy will determine the domestic uranium mining and milling industry's viability on the basis of information provided by EIA on the current and projected attributes identified in §§ 761.3 through 761.6.

### § 761.8 Reports by companies involved in domestic uranium commerce.

(a) Every company engaged in domestic uranium commerce shall report periodically to the EIA, in accordance with forms and instructions issued by EIA, such information as is required, including the following:

(1) Inventories of and requirements for uranium supplies.

(2) Terms of contractual arrangements for uranium sales, purchases, loans and other similar forms of uranium commerce.

(3) Reserves of uranium-bearing ore.

(4) Exploration, development, construction, production, and operation activities concerning uranium supplies.

(5) Capital expenditures and employment for uranium exploration, development, construction, production, and operation activities.

(6) Financial information about uranium exploration, development, construction, production, and operation activities, such as that contained in:

(i) A Balance Sheet;

(ii) A Statement of Income;

(iii) A Statement of Changes in Financial Position; and

(iv) A Statement of Changes in Property, Plant and Equipment and a related Statement of Changes in Accumulated Depreciation, Depletion and Amortization, which will provide data similar to that contained in Schedules V and VI of Securities and Exchange Commission Form 10-K.

(b) The EIA has determined that the data to be furnished on individual company uranium exploration, development, construction, production, operation, and marketing activities may constitute confidential commercial information as specified in the Freedom of Information Act (5 U.S.C. 552). The EIA has taken the position that such individual company data will be kept confidential to the maximum extent permitted by the Freedom of Information Act and the Trade Secrets Act (18 U.S.C 1905). Except as otherwise provided by law, the information must be made available, upon request, to the Congress or any Committee of Congress and the General Accounting Office.

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## QUESTIONS FROM SENATOR BINGAMAN

## URANIUM ENRICHMENT

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| Question 136: | The General Accounting Office stated in a December 27th, 1984 report that the DOE's recent uranium enrichment contract was issued without required Congressional review and in violation of the Administrative Procedures Act. The GAO also identified serious substantive questions with respect to the contract.<br>Please provide me your reaction to the issues raised in the GAO report related to the uranium enrichment contract and what changes you will recommend? |
| Answer: | I have been advised by the Acting General Counsel that many of the issues raised by the General Accounting Office report currently are the subject of litigation in Western Nuclear, Inc. v. DOE. Therefore, it would be inappropriate to discuss substantively the issues raised by the General Accounting Office at this time. However, the Department does not believe it violated the Administrative Procedure Act and informed the General Accounting Office of our position in a letter from the Department's Deputy General Counsel dated October 18, 1984. |

## QUESTIONS FROM SENATOR BINGAMAN

## DEPARTMENT OF ENERGY/CAPTIVE SHIPPERS

Question 137: I understand a study was recently completed by your Department regarding the issue of "captive shippers." When will this report be made available to the Congress?

Answer 137: The Department of Energy's Office of Policy, Planning, and Analysis has been assessing the extent of competition in transporting coal from mines to powerplants, as well as the impact of railroad deregulation on the cost of coal transportation.

This study was initiated about 9 months ago and is not yet complete. We expect to have a final report in the spring.

## QUESTIONS FROM SENATOR DOMENICI

## URANIUM ENRICHMENT

Question 1: The Department intends to make a decision in May 1985 as to which advanced technology it is going to pursue (i.e., AVLIS or AGC) for continued development. Please explain the likely scenario for the development of each of the technologies should it be selected. Please provide the approximate costs of each of these scenarios.

Answer 1: If Advanced Gas Centrifuge (AGC) wins the process selection, AGC advocates have recommended development from the period FY 1986 to FY 1988 costing $158 million. Reliability testing of centrifuge machines will cost an additional $239 million for the period FY 1986 to FY 1990.

Under this plan, during the FY 1985-FY 1986 period, AGC development would include continued long term testing of centrifuge materials and components to assess operating lifetimes. As the components are qualified, they would be incorporated in full scale centrifuges. By 1986, full size centrifuges having all the required components would be under test. The Gas Centrifuge Enrichment Plant (GCEP) at Portsmouth, Ohio, would be modified to accommodate 30 Set V centrifuges and we will then begin reliability testing of these specially instrumented machines. The capability of a 600 Separate Work Unit/yr machine would be demonstrated by 1986.

Answer 1: (continued)

We believe that by mid-FY 1987, sufficient technical information on the Set V centrifuge would likely be available for input to a decision as to production of Set V centrifuges for installation in the GCEP.

If Advanced Vapor Laser Isotope Separation (AVLIS) wins the process selection, $680 million in further development and demonstration is recommended by the AVLIS advocates for FY 1985 to FY 1992. The major elements of the recommended development program are to complete construction and operate full scale laser and separator systems prior to a decision to deploy AVLIS as part of the United States enrichment complex. A full scale technology demonstration could occur in FY 1987. A full scale demonstration should have all key parameters at plant specifications.

The second major element in the recommended development program would take place in FY 1988. This will be establishment of the reliability, maintainability and availability of the various components used in the AVLIS process. This would be accomplished by repeated operations of the laser-separator systems providing extensive data for general plant operating characteristics.

Answer 1: (continued)

These demonstrations, along with a detailed plant conceptual design, would provide reasonable confidence of plant capital and operating costs and thus final product costs to lend credible support for a deployment decision. The Department will describe its reference demonstration plan for the selected technology in May 1985.

QUESTIONS FROM SENATOR DOMENICI

URANIUM ENRICHMENT

Question 2: The Department also intends to make a decision regarding which, if any, of the gaseous diffusion plants could be shut down or placed in standby. Please explain the criteria which will be used in comparing the advantages and disadvantages of the different plants. Please provide the savings which would be realized for each of the diffusion plants if they were closed in FY 87. Please identify the nature of the savings at each plant (e.g., electrical costs, salaries, other operating costs, etc.).

Answer 2: If a decision is made in May 1985 to shut down, or place in standby, a gaseous diffusion plant, the criteria that will be used to compare the advantages and disadvantages of the three gaseous diffusion plants include economic, technical, and other considerations. Electrical power is the predominant element in the comparative cost. Other major cost elements include operating/maintenance costs, materials, services, equipment and supporting capital projects.

The results of the socioeconomic studies of the areas surrounding the three plants will also be considered. Draft copies of these studies are now available for public comment.

Other factors to be considered include the risk of natural phenomena (such as earthquake), plant operating flexibilities, and potential ranges of plant production.

Answer 2: (continued)

Previous studies have indicated that annual savings in operating cost exclusive of power would be about $50 million. Studies are underway to refine the estimates for each site. It is assumed that the production at the closed Gasecus Diffusion Plant would be replaced at the two remaining plants. The combination of these costs will provide the comparative economics for each of the three plants.

## QUESTIONS FROM SENATOR DOMENICI

## URANIUM ENRICHMENT

Question 3: The Department has suggested Appropriation language which would require that some revenues from the enrichment of uranium be transferred to the Treasury in partial repayment of previously appropriated funds. What is the total amount of previously appropriated funds which have not been repayed to the Treasury? In a letter of August 10, 1984 to Congressman Ottinger, the General Accounting Office estimated that the unrecovered balance was "about $6 billion as of the end of fiscal year 1983." Please explain why your estimate of the unrecovered balance is not the same, if it is not. A copy of the August 10, 1984 letter will be provided to you if you have not received one.

Answer 3: The actual net appropriation to uranium enrichment since 1969 has been about $1.2 billion. The $6 billion figure noted in the General Accounting Office August 10, 1984, report is the Government investment as of the end of FY 1983. It represents a portion of the investment made prior to the beginning of commercial enrichment in 1969, investment since 1969 and almost 20 years' interest expenses. We are developing the appropriate amount and timing of payment to the Treasury as a part of the May 1985 business plan.

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